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REPORT
OF
EXAMINATIONS OF SCHOOLS
IN
NORFOLK COUNTY,
MASSACHUSETTS.

BY
GEORGE A. WALTON,
AGENT OF THE STATE BOARD OF EDUCATION.

BOSTON:
Rand, Aberg, & Co., Printers to the Commonwealth,
117 FRANKLIN STREET.
1880.

Compliments of

Geo. A. Walton.



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APPENDIX A. — FORTY-THIRD ANNUAL REPORT OF THE BOARD OF EDUCATION.

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REPORT.

A COMMITTEE of the Norfolk County School Committees' Association was appointed at the fall meeting in 1878, for the purpose of examining the children throughout the county that had been four years, and those that had been eight years, in school. I was invited by the Committee to act for them in making the questions, and in conducting the examinations. By direction of the Board of Education I entered upon this work. The Board subsequently requested me to furnish to them in tabular form, as well as to the County Association, the results of the examinations. These results, with the necessary explanations, are herewith submitted.

EXTENT OF THE EXAMINATIONS.

The examinations were to be of children that had been four years and those that had been eight years in school, and were to embrace the three leading studies pursued in the schools,—reading, writing, and arithmetic.

It was at once apparent that there would be difficulty in ascertaining with any degree of accuracy what pupils had been in school four and eight years, and then of separating such, and examining them by themselves; nor was it supposed that such a definite limit in point of time was contemplated by the Association. The presumption was that pupils who had been in school four years would be about nine or ten years old, and would be found in the upper class of the primary schools; and that those who had been in school eight years would be about thirteen or fourteen years old, and would be found in the upper class of the grammar schools. Accordingly it was decided to examine the upper class in each of these two grades of schools, and only in exceptional instances were the questions submitted

to pupils in other grades. These were practically grammar classes; two were classes that had been recently admitted from grammar to high schools, and four or five were classes of the grammar grade in high schools.

The following is the aggregate of classes and pupils examined, with the kind of schools to which they belonged:—

Number of primary classes	.	.	.	.	.	.	.	.	154
grammar classes	.	.	.	.	.	.	.	.	122
Total	.	.	.	.	.	.	.	.	276
Number of pupils of primary grade	.	.	.	.	.	.	.	.	2,866
grammar grade	.	.	.	.	.	.	.	.	2,095
Total	.	.	.	.	.	.	.	.	4,961
Number of primary schools	.	.	.	.	.	.	.	.	90
grammar schools	.	.	.	.	.	.	.	.	61
mixed schools	.	.	.	.	.	.	.	.	61
Total	.	.	.	.	.	.	.	.	212

After the examinations were in progress it was found that there was considerable difference in the ages of pupils belonging to the same class, and in the average age of pupils examined in different towns and in different schools of the same town. Accordingly, without changing the basis of the examination, it was decided, in tabulating the results, to include only those of the lower grade whose ages were from eight and a half to ten and a half years, and only those of the higher grade whose ages were from twelve and a half to fifteen and a half years. By extending the age of the grammar grade to fifteen and a half years, liberal allowance was made for increased absences during the later years of school-attendance. That the major part of the pupils in the upper class of the grammar grade might be included in the tabulation, this extension was necessary in many of the schools. With these limits as to age, it will be seen, by comparing the total number examined with the total number tabulated, that a considerable number of those examined are not included in the tables. The number of pupils of the lower grade, whose rank is reported in full or nearly so in the tables, is 1,650; the number of the upper grade is 1,646; the total number is 3,296.

The report of the oral reading, and in many schools also of

the written exercises, embraces all that were examined; and the results would not differ essentially if, in all the branches, all the pupils examined had been reported in the tables.

It should be stated that on many of the papers the ages of the pupils were omitted; in all such cases it was assumed that they were of the average age of the balance of their class, and hence the results of their work are included in the tables of percentages in all the particulars of the examinations.

Whilst the examinations, as already stated, were limited to reading, writing and arithmetic, in reading, the pupils were tested as to their power to read both to themselves and to others, and especially as to their ability to read at sight; under writing were embraced penmanship, spelling, and composition; a test was applied to the pupils in arithmetic, to ascertain their proficiency in performing arithmetical operations, and their ability to comprehend and solve practical problems. All the results of the examinations were carefully marked upon a scale of one hundred. The aggregates and averages will be found in the tables appended to this report.

If it appears that the schools as a whole rank higher in one branch than in another, the cause may be in the fact, or in the standard of the examiner who applied the tests, and judged of the results. It is not unlikely that some one branch receives more attention, or is better taught, in the schools than another; all that the examiner can claim is, that, in doing the work assigned, he has acted according to his best judgment.

TESTS AND MARKING FOR PUPILS FOUR YEARS IN SCHOOL.

In preparing for the examination, it was assumed that a certain standard in each of the studies should be reached, and questions were submitted calculated to test the pupils with reference to that standard.

READING.—The test in oral reading for pupils of the primary grade was the reading of one of the “Prudy” stories. Three books were placed in the hands of the pupils, and passed in succession from one to another till all had read one or more paragraphs. The reading was of the grade of an ordinary third reader, and was read without previous study.

Marking of Oral Reading.—The oral reading was marked with reference to the mechanical execution and expression; and an average was taken. Under mechanical execution were

included position of body and of book, articulation, pronunciation, fluency, and force; under expression were included rate, pitch, stress, inflection, apparent understanding of the piece, and adaptation of qualities of voice to awaken thoughts and feelings in the mind of the hearer.

WRITING. — In testing the pupils of the primary grade in this branch, they were furnished with paper and lead-pencil, and were requested to write from dictation the following three sentences: —

1. Which is the better scholar, John or I? 2. Whose little girl are you? My father's. 3. This is a pleasant February day.¹

Each pupil was also requested to write a letter under the following conditions: —

He was to suppose himself to be at Lynn, or some other place, on a visit, and from that place he was directed to write to some person at his home; he was to state three things about his visit, and to close by telling his friends that he was coming home the next Wednesday, and that he wanted to have the carriage or sleigh sent to the depot to meet him. He was requested to write the letter in proper form, with date, address, compliments, and signature, these terms being expressed in language he could comprehend.

In schools where the pupils had not been used to letter or composition writing, some hints were given to aid them in thinking of something to write. This may account for some similarities in the thoughts expressed in the letters.

The letter was marked for its substance, for its mechanical execution, and for its forms. The substance was considered first for the thought, afterwards for the expression; the results were then combined, and denoted by one percentage. Under the mechanical execution a percentage was found for the penmanship, spelling, capitals, and punctuation. Under the forms a percentage was found for the date, address, compliments, subscription, and general arrangement of the body of the letter.

PENMANSHIP, SPELLING, CAPITALS, AND PUNCTUATION. — The letter and the sentences previously referred to were given as tests in all the above items; the following words were also written from dictation for spelling: —

- | | |
|-------------------------|-------------------------------|
| 1. week (seven days). | 3. rode (past tense of ride). |
| 2. waste (to squander). | 4. sail (of a boat). |

¹ These forms were slightly varied, the last to suit the month and the weather.

Marking of Penmanship. — The penmanship was marked for its legibility and uniformity and for what it promised in these, and in rapidity. The standard was the greatest excellence attained by some of the best writers in the schools that excelled in penmanship.

Marking for Spelling. — Spelling was marked by a percentage of the errors made in spelling the words, "week," "waste," "rode," and "sail," and by a percentage of the errors made in writing the sentences; there being in the sentences ten chances for errors.

Marking for Capitals and Punctuation. — Violations of the most obvious rules for capitals and punctuation were marked from the sentences; there being seven chances for errors in the use of capitals, and four in the use of punctuation-marks.

Marking of the Letter. — The percentage given for the substance of the letter was about equally divided between the thought and the expression. In making up the percentage for the mechanical execution, twenty-five per cent was allowed for penmanship, twenty-five for correct spelling, thirty for the right use of capitals, and twenty per cent for the punctuation. In making up the percentage for the forms, the percentage was equally divided among the five items, the date, address, compliments, subscription, and arrangement of body, of the letter.

ARITHMETIC. — The following tests were applied in numbers: —

1. The pupils were required to write in order upon the paper the answers to the following questions: —

I. How many are

(1.) Three times seven, or 3 sevens?

(2.) Eight times nine, or 8 nines?

(3.) Six times seven, or 6 sevens?

(4.) Nine times five, or 9 fives?

(5.) Seven times eight, or 7 eights?

(6.) Seven and eight, or 7 plus eight?

(7.) Nine from seventeen, or 17 less 9?

(8.) Nines in seventy-two? (or times 9.)

(9.) Eights in thirty-five? (or times 8.)

(10.) Suppose you go to the store with a quarter of a dollar (twenty-five cents) in your pocket, and spend ten cents for a slate, and the rest of the money for oranges at three cents apiece, how many oranges would you buy?

II. Write in column, and add, the following numbers: 184, 337, 692, 476, 208, 356, 575, 993, and 888.

Marking of Arithmetic.— Two percentages were made in marking the arithmetic, — one for mental arithmetic, on the results in the first ten examples, the other for written arithmetic, on the column addition.

TESTS AND MARKING FOR PUPILS EIGHT YEARS IN SCHOOL.

READING.— The test in oral reading for pupils in the grammar grade was a simple story selected from a Fourth Reader, "How Johnny bought a Sewing-Machine." The piece was read without previous study, three books being used, and passed from one pupil to another.

The test in silent reading was applied by giving each pupil a printed narrative, which he read silently, and then wrote in his own language from memory. He was allowed about six minutes for the silent reading, and about an hour for the writing.

The following is the narrative:—

"Cyrus, the Persian prince, had many masters, who endeavored to teach him every thing that was good; and he was educated with several little boys about his own age. He was a boy of a very good disposition, and a humane temper; but even in his youthful games he showed a strong desire to command, and other boys used to make him their king. One evening, his father asked him what he had done or learned that day. 'Sir,' said Cyrus, 'I was punished to-day for deciding unjustly.'— 'How so?' said his father. 'There were two boys,' said Cyrus, 'one of whom was a great, and the other a little boy. Now, it happened that the little boy had a coat that was much too big for him, but the great boy had one that scarcely reached below his middle, and was too tight for him in every part. The great boy proposed to the little boy to change coats with him; "because then," said he, "we shall be both exactly fitted, for your coat is as much too big for you, as mine is too little for me." The little boy would not consent to the proposal; upon which the great boy took his coat away by force, and gave his own to the little boy in exchange. While they were disputing upon this subject, I chanced to pass by, and they agreed to make me judge of the affair. But I decided that the little boy should keep the little coat, and the great boy the great one, for which judgment my master punished me.'— 'Why so?' said Cyrus's father: 'was not the little coat most proper for the little boy, and the large coat for the great boy?'— 'Yes, sir,' answered Cyrus, 'but my master told me I was not made judge to examine which coat best fitted either of the boys, but to decide whether it was just that the great boy should take away the coat of the little one against his consent; and therefore I decided unjustly, and deserved to be punished.' "

Marking of Reading. — The oral reading was marked for the mechanical execution and for expression. The marking for silent reading was upon the degree of accuracy which the pupil showed in writing the narrative given above. A hundred per cent was allowed when the story as a whole, and the essential particulars, were accurately told.

WRITING, INCLUDING WRITTEN EXPRESSION, PENMANSHIP, CAPITALS, PUNCTUATION, AND SPELLING. — The writing of the narrative was intended to be an exercise in written composition. When it was placed in the hands of the pupils, they were told to read it so that they could write it in their own language from memory.

When they had read it, they were furnished with ruled letter-paper, and were directed to write out the narrative, using pen and ink; they were told to give a title to the piece if they could think of one, and to do the work as well as they could in all respects. More specific directions were given where it was thought necessary.

In addition to the spelling in the written narrative, the following words were dictated for written spelling: —

- | | |
|---------------|-----------------|
| 1. deluge. | 6. sugar. |
| 2. decency. | 7. Chinese. |
| 3. denies. | 8. complete. |
| 4. colonel. | 9. supersede. |
| 5. deterring. | 10. changeable. |

Marking for the Written Expression, Penmanship, Capitals, Punctuation, and Spelling. — Under “written expression” were embraced the title of the narrative, the omission, misuse, and repetition of words, the grammatical construction, and the style of the language. In marking, a slight deduction was made for the repetition or omission of words; while a serious misuse of words, an error in grammatical construction, or a gross inelegance in the use of language, reduced the percentage more largely. In some of the mixed schools, instead of the narrative, letters were written. These were marked as nearly as possible in accordance with the same plan.

In a few instances the narratives were unfinished from no fault of the pupils: the plan of marking these was to take the longest in the particular school where they were written, fix its marks, and compare the others with that one as a standard.

The *penmanship* was marked from the character of the handwriting in the narrative and with reference to what it promised as well as to what it was.

Capitals and *punctuation* were embraced in one percentage; in exercises that were finished, twenty per cent being allowed for the proper use of quotation-marks and the complement, eighty per cent, for other marks of punctuation and capitals, while a deduction was made according to a general plan for exercises that were left incomplete.

For *spelling*, two percentages were marked, — one upon the errors in the written exercise, the other upon the errors made in spelling the ten words, “deluge,” “decency,” &c.

The former percentage was found by allowing a hundred per cent if the narrative contained ten lines or more, and was free from errors. In narratives of about twenty lines, the usual length, five per cent was taken off from a hundred for each misspelled word; when the narratives were shorter and unfinished, a larger per cent was deducted for each error. Some errors, as the repetition of a misspelling, were considered less grave than others, and were but lightly marked.

ARITHMETIC. — Four examples were given to pupils of this grade, as tests in arithmetic, viz.: —

I. The addition in column of eleven items, each containing three orders of units. (The time allowed was five minutes.)

II. A certain number, consisting of four orders of units, was given; the pupils were directed to find, by the shortest process, what would be the result of multiplying this number by 12, and dividing the product by 72.

This was expressed on the board thus: $0000 \times 12 \div 72$.

III. An example in simple interest was assigned; the principal consisting of dollars (four places), the time from Aug. 20 to Dec. 5 of the same year, the rate eight or nine per cent; the interest being required.

IV. The pupils were asked to find the cost, at ten dollars per rod, of the fencing required to enclose and separate a number of rectangular lots of land which adjoin on the side, and have their fronts in the same straight line, each lot being two rods wide in front and four rods long on the side.*

* In all the exercises in arithmetic, the pupils used Walton's Tables, by which pupils sitting side by side had different numbers, though practically doing the same example.

The following problem was assigned to pupils in this grade who had not studied interest:—

A certain number of dollars was given (different numbers to different pupils): the pupils were to suppose this sum to be paid for three-eighths of a farm, and to find what should be paid for the rest of the farm at the same rate.

Marking of Arithmetic.—A percentage was found for each of these examples; account was taken of the numerical operation and of the abbreviated and logical process.

HOW THE TESTS WERE APPLIED.

The general plan of the examination was approved by several persons of experience, to whom it was referred before being applied in the schools. Some gentlemen of the committee on the examination were appointed to aid me: These were Rev. J. P. Bixby, chairman of school committee of Norwood; Mr. J. W. Allard, superintendent of schools of Milton; Mr. William G. Nowell, superintendent of schools of Weymouth; and Mr. George I. Aldrich, superintendent of schools of Canton. Mr. Bixby assisted in the schools of fifteen of the twenty-four towns of the county; the other gentlemen in the remaining towns, each in those in his own vicinity. I made the examinations in oral reading, and marked the pupils of both grades in most of the schools; and in most I was present while the examinations were going on in the other exercises. By the aid of these gentlemen, the work of examining was greatly facilitated, the time being abridged one-half in schools having pupils of both grades examined. Where all were so efficient, it is not, perhaps, necessary to make mention of any one; but the service of Mr. Bixby was so great, and rendered at such personal sacrifice, as to be worthy of special recognition.

The school committees or superintendents of schools of the respective towns were present in most instances, and aided in arranging and preparing the children for the examinations. The teachers also assisted in this part of the work, and in various ways helped the examiners.

The examinations were begun in December, and ended in the following May. The time given to each class varied from one hour to one hour and forty minutes in the primary grade, and from one hour and a half to two hours in the grammar grade. Generally the time allowed was ample for the large majority of the class to complete the work.

In some few instances it was necessary to take up the papers before they were finished, and in a few schools the written exercises or the oral reading were omitted altogether. Where the exercises were assigned, in most instances, in the opinion of the examiners, sufficient time was allowed to do the work required. Where this was evidently not the case, in marking the papers for the tabulated results, allowance has been made for the deficiency. These explanations will account for most of the omissions of items in the tables.

The reason for sometimes abridging the work, as mentioned above, was found in the necessity of completing the examinations during the winter and spring terms, in the desirability of completing them in each town as soon as possible after they were entered upon in that town, and of giving about the same amount of time to each school. The occasion also for abridging, in some cases, was the time consumed in some of the towns in reaching the schools, the delays in getting the work before the pupils, owing to a want of quickness of comprehension, or of familiarity with written exercises, and the habit the pupils have of writing quite slowly.

The writing of the letters was omitted in a few schools because the pupils were wholly unused to the exercise of letter or composition writing, — in some, in fact, could neither write, nor make the printing letters. In a few instances, the teachers objected to submitting their schools to some of the tests, and their feelings were regarded.

It was found from the examinations in the first two or three schools, that the pupils required more time than was anticipated when the questions were prepared; accordingly, without changing their general character, two of the questions in arithmetic for the grammar grade were slightly shortened when given in other schools. The questions given in the towns marked C and T, however, were in all essential points the same as were given in the town marked A, which was the first examined. The tests given in the early pages of this report, with the slight exceptions elsewhere named, were uniformly applied in all the other towns. The tests were submitted orally, and, when practicable, written upon the blackboard also: all proper explanations were given, and questions answered, by the examiners.

Some schools had no pupils between the ages of eight and a half and ten and a half years who could do the work prepared

for their respective grades. The questions were sometimes modified to suit the attainments of the children, but the results of the examination do not appear in the tables. On the other hand, there were a few schools where the pupils that did the work were all under the age reported, and their work of course does not appear.

There was nowhere, on the part of the teachers, indifference to the results of the examinations; there was, indeed, solicitude with many while the examinations were in progress, and this was shared in some cases by the school committees. But this feeling, which was quite natural and entirely proper, was generally exercised with good sense and a due regard to the ends to be attained by the examinations. Teachers and committees manifested a desire to make the examinations a fair test of the attainments and ability of the pupils, and such in general it is believed they were. It is a pleasure to be able to testify to the excellent spirit manifested by all towards the examination and the examiners.

THE MARKING, AND TABULATION OF THE RESULTS.

On the completion of the visitations of the schools, there were about four thousand papers to examine and mark. This required the handling of each paper many times, for each was to be marked for at least twelve different results, some of these depending upon several particulars. And the work of aggregating and averaging these would then remain to be done. No time that I could command would be sufficient to bring out the results of the examinations in the current year. Mr. William G. Nowell was accordingly appointed by the committee to assist in this part of the work. To this he devoted considerable time in the summer months, rendering most efficient service in marking the papers in penmanship, arithmetic, and spelling, and in tabulating the results of the primary grade. The report is indebted to Mr. Nowell, also, for several interesting details.

It is proper to state, also, that Mrs. Walton has spent, since the first of June, on an average, six hours a day in marking the papers, in verifying, and in tabulating. This part of the work has required much more time and labor than was anticipated. I regret that it has so long delayed the report; but, with the demands made upon my time by other official duties, it was impossible to present it at an earlier date.

PERSONAL OBSERVATIONS IN THE SCHOOLS.

Besides the tables of percentages, and for the better understanding of these, I desire to give the results of my personal observations.

READING.

The exercise of reading involves two distinct processes, — the forming of the ideas and thoughts in our own minds by looking at the words, and the utterance of the words so as to excite ideas and thoughts in the minds of others.

By this analysis we see, first, that reading is something more than recognizing and pronouncing words: the words are signs, and are to be recognized only as a means of awakening ideas and thoughts. If the pupil does not have these awakened by the words he uses, he does not read at all; nor is the process, so far as reading is concerned, simply useless, it is dangerous, just in proportion to the facility with which the words are called.

In the second place, we see that there are two distinct objects to accomplish in teaching to read. The reader is to learn to associate in his own mind ideas and thoughts with their written or printed signs; he is to learn to utter these words so as to awaken in the minds of others such ideas and thoughts as the words are intended to awaken. There are, then, two kinds of reading, — silent and oral. Which, if either, of these two kinds should the schools make the important end in teaching? This is equivalent to asking, which will be most useful to the pupil, or most used by him?

Oral reading is useful in training the organs of speech to the accurate enunciation of words, in training the vocal organs to the production of the proper tones, and in training the organs of respiration to give the proper force in the utterance of words and in the modulation of the voice; all of which are useful in strengthening the organs themselves, in fitting the pupil to use language, and to speak so that he can be heard. This mechanical part of reading is useful in various ways.

Oral reading, as a means of communicating the thoughts ourselves or others have penned, is not to be lightly esteemed; it merits on this account more skill than is ordinarily bestowed upon reading. For this implies a clear conception of the

thoughts of the author, an appreciation of his feelings, and such a power of expression as perfectly to excite these thoughts and feelings in the mind of the hearer. It implies the ability to give ourselves, mind and body, in service to others. But the little, comparatively, which most persons read for the instruction of others, would not constitute a sufficient ground for giving oral reading the prominence it has in the schools.

If we reflect that the reading which men in general do is done for themselves, we shall see that the pupil is to learn silently to take the sense from the words of the written or printed page. The relation of silent reading to all knowledge acquired by the reading of books is such that the ability to read silently can scarcely be over-estimated.

The above distinction between silent and oral reading is important, as showing the true end of teaching reading; but the fact is, that oral necessitates silent reading, and the effectiveness of the former depends largely upon the quality of the latter. Oral reading is to be taught chiefly as presenting the best occasion for the exercise of the powers of the mind in acquiring, for the sake of giving, the sense of what is written.

In teaching oral reading, then, while the teacher may not lose sight of the fact that the chief end of reading is, to give the pupil facility in obtaining the ideas and thoughts, he will lead him to keep constantly in mind the wants of the hearer. This will give a proper direction to the aim of the pupil, both in preparing for his reading, and in the reading itself. It will tend to direct his attention away from himself, and stimulate him to make his best effort, by placing the right motive within.

This may seem to be setting up an ideal standard: it must be confessed that it is not generally reached; but it is believed to be entirely practicable, even in the lower grade of schools, to teach the pupil to read, prompted solely by the desire to affect the mind of another. This motive cannot be employed too early, or too exclusively. When this desire is the motive, the pupil will feel the necessity of first understanding for himself what he is to read. The necessity, prompted by this motive, must result in giving him facility in reading for himself.

In the examinations, the oral reading was considered a test of the ability of the pupils, both to take and to give the sense of a kind of reading with which they were supposed to be familiar. The results were widely different. On the one hand,

there were many pupils in both grades, but particularly in the primary, who called off the words in a droning and monotonous way, or shouted them out one after the other with as little regard to the thought as if they had been the columns of a spelling-book. On the other hand, there were pupils who had formed the habit, while reading, of looking forward to the end of the sentence, that they might comprehend the thought before uttering the words. In some instances pupils asked to be allowed to read their paragraph again, saying they did not understand it before. The causes for these differences are found in the difference in the tact of the teachers, and in the difference in their methods and aims: I am not inclined to admit that they result so largely from the superiority of the children in any town or in a particular part of a town, as in some instances members of the school committees claimed.

In general, oral reading is made the end; and the conception the teacher has of this is frequently limited to the articulation of words, to the loudness or fluency of utterance, to the position of the body, to the holding of the book, in some instances to correct pronunciation, and sometimes to extreme precision in all these, and to a straining after the elements which are the means of expression. The voice is often made simply to repeat the words of the paragraph that falls in the class to "the next," or at most led only to imitate in a servile manner the reading of the teacher; or, if trained in tone, pitch, rate, stress, inflection, and so on, it is not in the use of these to the expression of thought. And, as for any systematic analysis by which the pupil learns to make a careful and independent study of his piece, it is but little practised in the schools, even of the grammar grade.

In the larger number of the primary schools, the teachers seem to regard the expression of thought as not within the province of the young pupil. No greater mistake can be made than this: the little child should read with expression the first time and every time he reads. He uses slides of the voice, and stress, when he has thoughts and feelings of his own to utter, and this long before he goes to school: can he not be taught to use them in expressing the thoughts and feelings of others? He has the means; fix in him the motive by directing his attention to the thought; if he has this, he can hardly fail to express it. The training will at least be an easy and agree-

able task. Where bad habits are confirmed in childhood, it requires the skilled hand of a professor, later on, to make a good reader.

A difference in the quality of the reading results from the method of the early teaching of the child. If the teaching is strictly by the A B C method, in which the child is taught to spell out the words before pronouncing them, and then to pronounce them word after word without reference to the sentence they form, the mind is directed chiefly to the spelling-out and pronunciation of the words, and is thus turned away from the thought and expression. Where the reading is taught by the object and word method, the interest awakened in the child, in the object of knowledge, naturally leads to an interest in the words and in the reading. Instead of something imposed upon the pupil, which blunts the mind to all mental effort except to escape from the drudgery, the process excites the desire to know and to tell, and thus puts within, motives which give facility in acquiring knowledge, and make the mind skilful in associating ideas and thoughts with words, and in using the physical organs as instruments for expression. Norfolk County is not without many excellent examples of the right method and aims in teaching, while examples of tact are common which produce good results in apparent disregard of methods.

Table (A), appended to this report, will show the methods at present in use, and those in use four years ago, in the several towns of the county, in teaching beginners to read. The table shows considerable change in the four years, which indicates an awakened interest in the teaching of reading that may more than counterbalance the effects of bad methods at an earlier period. It was thought that possibly the differences in reading might be shown to result from the different methods of teaching. There are too many modifying circumstances, however, to make the table valuable as evidence upon this point. It is inserted in the report as interesting historically, and as likely to have a bearing upon the future progress in the art of reading in the county.

I found in many of the schools that the pupils were attempting to read in books wholly beyond their comprehension; the Fourth and Fifth Readers were in repeated instances in use by children who could not readily call the words of the simplest lesson in the Third Reader which I gave them.

Of some of the schools in one town, my notes say, "The

children were all reading in books too advanced for them ; none of those I attempted to hear read in the Third Reader could call words in the Second. Yet all were in the Third that had not already taken up the Fourth. Nearly all of the school should be kept in a grade of reading not above that of the Third Reader. What is true of these schools is true of the county as a whole : very many of the children are trying to read in books beyond their years."

To counteract this tendency, some of the towns have a plan of furnishing additional works supplementary to the ordinary reader. Several sets of different series of readers, of the first, second, and third grades, are purchased at public expense, and passed around from school to school throughout the town. The superintendent of schools in one of the towns remarked that the primary schools in his charge had read the First, Second, and Third Readers, of all the series that are worth reading. By this means the pupil can be kept upon reading suited to his capacity, and is able thoroughly to master the vocabulary of one grade before attempting a higher.

It is very desirable to secure in the pupil a love for reading while in the schools: This love is fostered by the facility with which the pupil learns, and by what he reads. The acquisition of real knowledge which is incident to a right method of teaching is a stimulus to this love. In those schools which I visited where the teaching was begun by teaching the object, then, with the blackboard or chart, its name, and finally producing a written sentence which expressed the pupil's or teacher's thought of the thing, I found an evident interest in reading, which was in marked contrast with what was seen where the A B C method was in vogue.

With this rational mode of teaching, the vocabulary of the pupil names real ideas to him. The words of the book, of part of it at least, are taught him in this way before the book is placed in his hand ; so when at length he has the book, it is a delight, and not a task, to read its simple and pleasing stories.

A good method and aptness in teaching, with suitable supplementary reading, cannot fail to increase this love. There are sufficient facts in Norfolk County to prove this to be the practical result.

With the exception of a single school of considerable size, so far as noticed, the girls of the higher grade are better

readers than the boys. The difference in most is quite marked. I can see no reason in the schools themselves why this should be so; but, if the examiners are not mistaken in their observations, the fact is worthy of the consideration of teachers and committees, as well as of the boys themselves and their parents.

So far as I could discover, with rare exceptions, little attention is given to what the children read, or to reading for the acquisition of knowledge, if we leave out of account the text of books committed to memory for recitation. The time of reading in both grades seems to be mostly occupied in teaching to call the words properly, without reference to the amount or kind of knowledge the pupil is to acquire. As an exception I saw in a few of the schools sentences used as reading-lessons for the younger pupils, which were evidently designed to teach some useful knowledge. Some exceptions were noticed also in the grammar grades, where books of history were substituted in part for the reading-books; not, however, in the few cases I saw, with any evident gain either to the exercise of reading or to the knowledge of history.

I see no reason why the earliest lessons taught in the primary schools should not be so arranged and conducted as to teach those elementary facts of plants, and those terms, which will afterwards be used in the study of botany,—that knowledge of animals and minerals which will afterwards be used in zoölogy and mineralogy, those forms and names which will afterwards be used in geometry, and so on; and no reason why the simple facts which underlie the other sciences should not be acquired through the reading-exercises of the intermediate schools. Portions of history can be selected which are suited to oral reading; but, like the selections in the advanced readers, the reading can hardly be worthy the time and attention of the class till it has been the subject of careful study by the reader.

While the pupils should read more than they now do, and read to gain useful knowledge, it would be a mistake to abandon the use of well-chosen reading-books for study and practice. These are distinguished from the books for general reading by being arranged with reference to training and culture. Before his oral reading the older pupil should study each selection, first to obtain a knowledge of the piece as a whole, then to get the sense of each paragraph, of each clause, and finally to determine what words to emphasize that he may give the sense

to the hearer. This kind of work cannot be done by the primary pupil, and his reading should not require it; but in the upper grade this should be done with every reading-lesson. The lessons of the reading-book furnish the occasions for this study. And this is precisely what is needed to prepare the student to read with profit history or whatever he may read before his class.

By such a plan of study the oral reading becomes a personal effort to express the results of the pupil's own judgment. It brings into requisition a class of books not common at present in the schools, — biographies, gazetteers, encyclopædias, and other books of reference.

The percentages for oral reading for the county are about one-eighth higher than the total average of all the studies. There are two reasons for this: first, the marking is not based upon the ideal standard of the examiner, but upon the ordinary estimate of school reading; and, second, oral reading ordinarily receives a large share of attention during the whole period of the schooling of the child, and really by the common standard shows better results than any other study taught.

The silent reading in the upper grade, as determined by the written narrative, is not marked so high as the oral; the standard was more absolute. The pupils who told the story as a whole, including all the essential particulars, were ranked one hundred per cent in the silent reading; those who failed to get the essential point of the story were marked from forty per cent upwards to sixty-five, according to the accuracy with which their writing was true as to particulars; while those who had misapprehended the story altogether were marked from fifty per cent downwards according to the misstatements they made.

It will be seen by a few specimen copies of the narrative, printed below, that the exercise revealed wide differences in the ability of the pupils to get the sense by silent reading. These differences are not confined to individuals: they characterize whole schools. There are exceptionally good papers found in schools which wrote poorly as a whole; the reverse of this is also true. The following are printed verbatim. Facsimiles of others will be found at the close of the report.

SAMPLES OF NARRATIVES WRITTEN FROM SILENT READING,
BY PUPILS IN THE GRAMMAR GRADE.

I.

PUNISHED FOR DECIDING UNJUSTLY.

Cyrus, the Persian prince, had a great many masters, who endeavored to teach him every thing that was good ; he was educated with several little boy's about his own age. He was of a good disposition and humane temper, but even in his youthful day's he possessed a strong desire to command, and the boys often made him their king. One night his father said to him "what have you done and learned to day " "Sir," said Cyrus "I was punished for deciding unjustly. "How so" said his father. "There were two boy's one a great and the other a little boy; the little boy had a coat that was much to big for him and the large boy had a coat that was much to small and tight for him in every part. The large boy proposed to exchange coats " "for said he we shall then be even for my coat which is much to small for me will be right for you." "But the little boy would not change so the large boy took the little one's coat and gave him his in return; just then I happened to be passing and they said that I should be the judge. I decided that the little boy should keep the little coat and the large boy should keep the great coat, And so I was punished. "How so said his father was not the large coat more suitable for the large boy and the small coat for the little one. "Yes sir" said Cyrus but the teacher said that I was not called upon to judge which was the most suitable but whether it was right for the large boy to take away the little boy's coat without his consent. "So" said Cyrus "I was justly punished."

II.

THE PERSIAN PRINCE.

Cyrus, the Persian Prince, had a great many masters, who tried to teach him goods things; and he was educated with several other boys of his age. He was a very good tempered boy, and had a humane spirit. He had a strong desire to command, and the other boys made him their king.

One day his father asked what he learned or done during the day. "Sir, said Cyrus, "I was punished to day for deciding unjustly." "How so?" asked father. "To-day" said Cyrus, there were two boys, one a great one and the other a small one. It happened that the big boy had a coat that was a great deal too small for him, while the small boy had a coat that was too large for him. The large boy proposed, that the little boy should exchange coats with him. But the little boy did not want to do this, therefore the big boy took it away from him by force. I chanced to be passing by and they called upon me to decide. I gave the little boy the small coat, and the big boy the large coat." "Why were you punished for that?" asked his father, "because the teacher said I was not to be the judge of whose coat it should be, but that whether it was right or not for the big boy to take away the coat from the small boy, therefore I was punished."

III.

JUSTICE AND UNJUSTICE.

Cyrus, the Persian prince had a great many masters who tried to teach him every thing that was right. He had several other boys educated with him. He had a very good disposition but he liked to command. When they used to play his playmates used to have him for their king. One evening his father asked him what he had learned that day. "I was punished for deciding unjustly," he said. "What did you do?" asked his father. "Why," he said, "it happened this way. There were two boys a large boy and a small boy. The small boy had a coat too large for him and the large boy had a coat that was too small for him in every part. Now the large boy wanted the small boy to exchange coats with him. The small boy didn't want to and so the large boy took it away from him. Just then I came along and they wanted me to decide for them. I thought that the small boy ought to keep the coat. The master said that I ought not to decide which coat fitted the best but whether the large boy had a right to take the coat by force. So I had decided unjustly and deserved to be punished."

IV.

ANECDOTE OF CYRUS.

Cyrus, a prince of Persia, had many teachers, and he was educated with other boys of his age. As he liked to take the lead, his companions made him there King. One day his father, asked him, what he had learned that day. Sir, said he, their was two boys, one great, and the other small. the small one, had a coat much to large for him, and the greateone had one to small, then the great one, proposed to change, but the small one, would not consent, and as I chanch to be passing by, they made me judge. I decided in favor of the Great one, thefore my master, pushed me. Why so said his father, was not the large coat better for the large boy, and the small coat for the small boy. Sir, my master asked me if it was just, to ttake the coat away without consent, and as I had judged wrong, I deserved to be punished.

V.

QUARREL ABOUT A COAT.

Cyrus, the Persian prince, had good many masters, his father asked him if he had done anything wrong to day, and he said, he had been punished, and his father asked him, what he had been punished for, and he said he had quarraled with another boy.

What about, said his father, and Cyrus said that, a boy he was with, had on a big coat, that just fited him, and his coat was to small for him-self, and this other boy wanted to exchange with him.

But Cyrus would not, just then a man came up, and settled the dispute, saying, that the big boy did very wrong in tareing the coat off the smaller boy.

So Cyrus had to be punished for not giving up his coat to the other boy.

VI.

CRYAS THE PERSIAN PRINCE

Cryas was a disobiant boy. The little boy thought that the large Coat

would be better for him, and the large boy thought that the small coat would be better for him. But the large coat was as much too small for the small boy as the large coat was for the large. The large boy had ought to have had the large coat and the small boy the small coat, I think that Cryus was a greedy boy.

VII.

PRINCE OF PERSIA

Cyphus the Prince of Persia he and another boy went out to walk he had a long coat on which was too big for him the other boy had a coat which was too small for him and only came down to his middle, and he wanted the little boy to let him take his coat (and the big boy) would let him take his little coat so Cyphus father came and said why would you not let him take the big coat and he would take the little coat so he went home and he became a prince.

VIII.

There was a man by the name of Cyrus who was a Persian Prince.

He had a very nice father, and asked him one night what he had done at school that day? He said, "That he had done something unjustly."

The boys, when Cyrus was playing any games with them used to make him their king. One day there was a boy who had a new coat, with Cyrus, and Cyrus wanted to make a change.

The one that the boy had bought was very much too large for him, while Cyrus's was small.

They kept on for two or three days, but would not agree upon it.

While they making this agreement, Cyrus's father came along. Cyrus had a very humane temper and was very gentle.

Because Cyrus would not change with the other in a few days he was punished.

IX.

The boy was whipped because he had the little boy's coat.

X.

Cyrus a Persian prince was a pleasant and educated boy but when he came home that night his father asked him what he had received that day. he said that he got punished at school his father asked him what for and he said that there was a great boy and a little boy had a goat and the big boy had a little goat and the little boy had a big goat the big boy wanted to exchange goats he have the big goat and the little boy have the little goat so the big boy took his goat away by force and I came along and they wanted me to be judge and I said that the little boy should have the little goat and the big boy should have the big goat and so that is what I got punished for in school.

XI.

Cyrus the Persian prince he was a boy of sense. One evening he was passing by the house a small boy had a big goat the goat was much larger than the boy so that they had a dispute over the goat the boys have him for the

judge he gave the little boy the goat when he got home his father asked him if he was good at school he said he had be punished injustly his father said that he must be kind to one as to the other.

WRITING.

Under writing, are included penmanship, spelling, and composition.

PENMANSHIP. — The requisites in penmanship are legibility, uniformity, and rapidity. Legibility is first in importance, and is to be first attended to in the teaching. To secure this, we must fix in the mind of the pupil definite forms for all the characters. Besides knowing these forms, the pupil must be taught uniformity as to height, width, slant, angles, and turns, and the proper curve-lines for connecting one letter with another. These elements have reference both to the uniformity and rapidity of the writing. Though rapidity is the last-named of the requisites to good penmanship, it is not to be left out of account in the early training. When a few of the simple forms can be executed, the training for rapidity in making these should begin. No little importance attaches to this training. That teaching which does not give the muscles a good degree of facility in executing the forms which the mind conceives, is practically a failure.

The tests which were submitted in the schools were intended to show in the lower grade the results of the teaching in the first two of the above requisites. They were intended to show in the upper grade the results in all. Certainly, if the schools are to teach a good practical handwriting, it must be before the pupils reach the age of fourteen or fifteen years; for, at an earlier age than this, the large majority of the children leave the schools.

Some of the differences in the results reached by the examinations are worthy of special notice. While some, even in the lower grade, could write with legibility and considerable ease, and some with apparent freedom and an approach to elegance, others in this grade were obliged to use the Roman letters to write their exercises, and even then mingled the capital and small letters in a promiscuous manner.

Where the writing is neglected in the lower grades, the time lost cannot be regained in the grammar schools; the result is, that much poor writing is done by pupils just ready to graduate from the advanced classes of these schools.

The lithographs appended to the report are facsimiles of the penmanship found in the schools; the best and poorest are selected from scores not dissimilar, while the average papers are fair samples of hundreds of their kind.

So backward are some of the schools in penmanship, and so forward are others, that there are many primary schools whose upper grade is more advanced than the upper grade of many grammar schools. The causes for this difference are found chiefly in the time and manner of learning to write. If the children are employed for the first three or four years mainly in calling the words of the reading-books, in committing to memory lists of words for oral spelling, in studying and reciting arithmetical tables and problems, with possibly the pages of a primary geography; if they make little or no use of the slate, and none whatever of paper, for written exercises, or if they use these simply to write out in Roman letters the words of their spelling-lessons, and to make the tables in arithmetic; if they have no systematic teaching in making even these forms, and none whatever in making the script letters or in drawing lines and figures,—it will not be surprising if excellence in penmanship should be rare even in the higher grades of the schools.

The absence of early training is perhaps the most evident in the way the children make the numeral characters; the figures are too often significant as signs of aimless teaching, and want of discipline in the taught, but are awkwardly made and inelegant as symbols of numbers. Yet there are but ten of these signs used to express the innumerable calculations made with numbers. What can be more profitable in the early training of the pupil than to teach him to form each of these characters after a perfect model? Contrast the ungainly 5's and 8's of some of the pupils with the beautiful forms of others, and it will appear at once that the culture of the mind will pay a thousand-fold for all the time and labor required to teach the child to make these useful forms with taste and elegance; for the difference in the figures is a trifle compared with the mind-culture implied in coming to the results.

Neglect to teach the proper forms of letters and figures occasions much groping by the children. As an illustration of this neglect, a large number of children introduce after *o*, in certain words, a superfluous character resembling an *i*; the

error referred to may be seen in the appended lithographs, for example, on page 236.

The writing in many schools is limited to what is done in the copy-books; this is especially true of the mixed and ungraded schools. The practice of writing is deferred till the pupil is old enough to use the pen and ink. The copy at the top of the page is written again and again, sometimes with a wider departure from the original at each repetition. No attention is given to the movement of the arm or hand, or to the forms; and very rarely, so far as I could discover, are the muscles trained to make movements with rapidity. This, I incline to think, is a universal failure in the schools.

In teaching penmanship, the object is to train the muscles to move from habit. Legibility should not be sacrificed to celerity of movement; and with proper teaching, it need not be. But where the pupils, in the examinations, have attempted to write rapidly, the result has been a fearful disregard, in most instances, of the elements of uniformity.

Most of the faults in the writing indicate imperfect teaching. There are schools, however, where, from the time the pupil enters the lowest class, he is trained to the use of the pencil, first with the slate, afterwards with the paper. In some of the best primary schools, most of the time not spent in the class is occupied by the children in making words and sentences, or letters, upon their slates; they are employed in copying these from the lessons the teacher writes upon the board. This process goes on for the first two years, the exercise being varied by copying from the reading-book, or the writing of sentences the pupils themselves have composed. In the third year, paper with proper ruling is substituted for the slate, and the pupil begins critically to analyze and form the letters, and systematically to combine these into words. In the fourth year, the pupil begins to use pen and ink, with the great advantage of a knowledge of all the forms of the letters, and considerable skill in using the muscles of the hand and arm.

This plan is pursued most largely in schools where the reading is begun with the script letters. Writing is employed in connection with every branch of study, and frequently in the recitation. Little reliance is put upon the copy-book for the large practice necessary to make writing easy; this is incidental to the expression of thoughts upon paper. The result is, the

pupil at an early age has a handwriting with the proper slant and connecting lines; elements so difficult to secure if the words are first made in the Roman letters.

An opinion has been confidently expressed by those competent to judge, that, where drawing and writing are taught together, the writing is better than where writing alone is taught, and that, even though no more time is given to the two branches than is frequently given to the writing. The examinations go to show that this opinion is well founded.

The observations in the schools, then, indicate that the best results are secured by having writing with the pencil begun early, and continued constantly till the pupil can use the pen; that as soon as he has mastered this, and can make the forms with accuracy, he needs special training in rapidity of execution. They show that the best results are reached in those towns and schools that have made the most systematic use of the script letters in teaching to read, and where drawing is also taught.

The wide range of percentages in writing in the primary schools is due to the change which has in the past few years taken place, in favor of using the script letters early. The towns that began this practice first, and have adhered to it most closely, have better writing than those that have deferred writing till later in the school course. Undoubtedly the plan, now becoming so general, of teaching the use of script letters and writing early, will have the effect to produce greater uniformity in coming years.

SPELLING.—The end to be secured in teaching spelling is the correct spelling of the words the pupil meets with in his studies, and those he will be most likely to use after he leaves school. These will include the names of familiar objects, of common qualities and actions, and some of the less significant words of the language. The spelling of the names of the days of the week, and of the months of the year, may be specified as words which should be early taught.

To secure this end there must be practice by the pupil in writing the words not simply for spelling from dictation, but in sentences and in composition exercises. The results cannot be satisfactorily reached by any amount of oral spelling. Repeated use of carefully selected words in written exercises, when the attention is not directed solely to the spelling of the words, is the only means of making practical spellers.

In selecting words for drill, those which are in common use should be chosen, and of these the words which are pronounced alike but spelt differently need special attention. In the upper grades, words which come under the common rules should be spelt till the rules can be readily applied: such are the rule for dropping the final *e* of a primitive word when a syllable is added which begins with a vowel, the rule for doubling the final consonant of an accented syllable when a syllable is added which begins with a vowel, and the rules for forming the plurals and possessives of nouns.

The results of the examinations indicate that far too much reliance is placed upon oral spelling, and that the words are not selected with discrimination on the part of the teacher; they show that the commonest words are misspelt when used in sentences or composition, while words of difficult orthography are spelt with accuracy when dictated for spelling. Thus the words, "too, their, there, here, hear, meet, piece, where, which, whose, been, pair, sure, sugar, week, weak, you, write, right, wrong, father," &c., were misspelt when used in composition by the same class of pupils who spelt "deluge, colonel, deterring," and "supersede," from dictation, with accuracy. The words, "whose, which," and "father," when spelt orally, were generally correct, but when written in sentences they were frequently, in many schools, in a majority of cases, erroneous.

The correct spelling in the primary grade of the words dictated with reference to spelling, also of those given in sentences, illustrates the necessity for spelling in the sentence.

The correct spelling in this grade for the whole county was marked as follows:—

	PER CENT.
Words dictated for spelling (" week, waste, rode, sail ") . . .	64.8
Words written in sentences:—	
(Ten words) average	58.1
(" which ")	69.
(" whose ")	54.
(" scholar ")	44.8
Average of the above three words	55.9

The same differences are seen in different towns, and in different schools of the same town. And the towns and schools that have the highest average percentages in all the branches taught, generally have the highest percentages in the spelling

of the words in sentences and of words in most common use. If one will take the pains to form tables of the schools of a town, he will find that the results in general show that teachers of skill and experience recognize the necessity of selecting for special drill the common words, and of having these words repeatedly used by the pupils in written sentences.

Table showing the Average Percentages of Correct Spelling in the Several Towns, in the Schools of the Primary Grade.

ALL STUDIES.		WORDS WRITTEN IN SENTENCES.						IN COLUMN.	
Town.	Per Cent.	Town.	Ten Words.	Town.	"Which."	Town.	"Whose."	Town.	Four Words.
C. ¹	82.1	C.	91	C.	92	C.	95	C.	89
L.	69	L.	69	L.	87	E.	76	L.	76
E.	68	E.	67	E.	84	Q.	68	F.	76
D.	64.6	P.	66	T.	83	I.	59	A.	75
P.	62.7	T.	60	S.	82	W.	59	U.	74
T.	62.2	D.	60	P.	76	F.	58	B.	71
R.	61.4	B.	59	W.	75	X.	58	Q.	71
B.	61.4	I.	59	G.	75	T.	56	I.	70
U.	60.8	F.	58	U.	74	P.	56	D.	70
A.	59.7	G.	57	N.	72	B.	54	R.	69
S.	56.7	Q.	57	D.	72	D.	54	W.	67
I.	56.1	R.	57	J.	69	V.	51	G.	67
F.	55.2	S.	57	I.	68	A.	51	E.	67
G.	53.3	U.	57	B.	65	U.	50	P.	65
J.	52.1	V.	55	A.	63	N.	49	S.	64
O.	51.3	W.	55	R.	62	O.	49	V.	63
V.	51.2	A.	54	F.	61	L.	47	T.	62
Q.	49	J.	54	H.	55	K.	47	J.	61
W.	48.3	O.	50	K.	55	G.	43	O.	57
M.	42.8	N.	45	Q.	53	S.	43	N.	55
N.	41.8	K.	44	M.	49	R.	38	K.	48
K.	40.5	M.	42	O.	47	M.	37	H.	47
H.	40	H.	39	V.	45	J.	31	M.	45
X.	32.1	X.	39	X.	43	H.	27	X.	45

The point referred to in the preceding paragraph, so far as the towns are concerned, is illustrated by the columns taken from the primary table and arranged above. The four or five towns that rank highest in the table of average totals for all the studies rank highest in the spelling in sentences, and those that rank lowest in the average totals rank lowest in the spelling in sentences: whereas the results of

¹ The letters of the alphabet designate the towns in the order in which they were examined; A being the first examined, B the second, and so on.

the spelling of the words dictated solely for spelling are comparatively uniform for the towns throughout the county; some whose rank is low in the general averages and in the spelling in sentences taking a high rank in the spelling of the words dictated for spelling, while the opposite is the result with some that hold a high rank in the general averages and in the spelling in sentences.

In general the principles stated above appear to be sustained by the spelling in the schools of the upper grade, — the per cent of correct spelling in the words of the written narrative differing but little from the per cent for the spelling of the ten words dictated for the spelling in that grade; yet the latter were selected as test words, and are generally of difficult orthography, while those used in the narrative are, principally, common, easy words. And out of 1,122 pupils who used the adverb “too” in the narrative, 859, or nearly 77 per cent of the whole, spelt that word incorrectly.

The different spellings of some of the words used in the sentences and letters furnish an interesting chapter for the advocates of reformed spelling. The following are illustrations: —

Spelling of Words selected from the Sentences and Letters written in the Primary Grade.

Carriage. — Carage, carrage, craidge, caradg, carege, carriag, carrige, &c.

Sleigh. — Saly, slay, slaig, slaigh, slagh, slaw, sleig, sleugh, sleight, sligh, sley, slew, slave, sleigh, &c.

Tuesday. — Tugay, tuestay, toesday.

Wednesday. — wanesday, wedenyday, Wedernsday, wednest, Wenday, Wendsday, wensday, wenesday, wensdaw, wenze, Wenzie, Wendsstay, wenstday, Wesday, Whensday, winday, Windday, Winsday, &c.

Thursday. — thirsday, thirsdday.

Friday. — friddie, fryday.

Saturday. — Sarty, sateday, Satterday, saterbay.

February. — Feabuary, feabery, febary, Febaury, Febeary, Feberiry, Febouay, Febrery, February, Febury, Febrwary, fedury, fepurary, Fubry, fepary, fepurary, &c.

The following methods, most of them used several times, for spelling the words, “whose,” “which,” and “scholar,” were noted in correcting the sentences: —

who ^{se} ,	whse,	whouoes,	How,	hus,
whos,	whhose,	wos,	Hoew,	huse,
who ^s ,	whors,	woes,	Hoys,	hurs,
who.'s,	whotes,	wo,	ho,	hors,
who.,	wher,	wose,	hos,	Hhose,
whuse,	wheir,	wow,	ho's,	Hhoes,
who ^s ,	what,	wous,	hosse,	Hhows,
who es,	whos'se,	wouse,	hoo,	hohe,
WHoes,	who'se,	woh,	hoos,	hoores,
whoe,s,	who''s,	wohes,	hoose,	Hwose,
wh,	who'ees,	wohse,	hooes,	Couse,
whoe,	whoe'se,	wohose,	hou,	Does,
whes,	whou's,	waese,	hou's,	Ohoes,
whis,	whous,	wraes,	house,	Thouse,
whoses,	whoes,	wlo,	houes,	Yhose,
wnees,	who ^{es} ,	wloes,	hourse,	Yous,
whoarse,	who'es,	wlaes,	how's,	loo,
whou,	whoe's,	Hoes,	howes,	ows,
whouse,	whos'e,	Heus,	howus,	owhs,
whoues,	whoos,	Hose,	hews,	whoise.
whows,	whoose,	Hows,	hewse,	
whs,	whoas,	Hous,	hoe,	

which,	whch,	whach,	whise,	whitn.
whick,	whck,	whuch,	whic,	with,
whitch,	wihch,	whiCh,	whir,	weeth,
whtch,	wic,	whigh,	whis,	whics,
wihtch,	wich,	whish,	whit,	which,
witch,	wick,	whist,	whah,	Hhich,
witth,	wech,	wihich,	whih,	hich,
wictch,	wch,	wichich,	whoh,	wotch,
writch,	weich,	whitc,	whi,	eitch,
witck,	wach,	whitcer,	what,	wihe.
witbh,	wuch,	witcee,	whet,	
witgh,	wish,	whice,	whit,	

Cholar,	choles,	col,	Clolor,	coler,
Cholea,	chaler,	colars,	clollar,	color,
Choler,	chalour,	colors,	cochlar,	collor,
Chooler,	Cho,	collar,	cohlar,	collores,
Cholor,	chola,	coller,	coholer,	coarlor,
Choolor,	cholla,	collere,	cohooler,	colln,
Chollar,	choolar,	callar,	caod,	corler,
Chollor,	choulder,	callor,	coolla,	Scalar,
chorilar,	Ccholar,	callores,	collr,	Scohlar,
cholor,	Cchollar,	caullar,	clolar,	scloar,
chouller,	Ccolar,	celler,	cloler,	sclore,
choled,	Ccolor,	corlal,	colar,	sclolar,

scholor,	scoler,	scholard,	scharl,	sholor,
scolore,	scolor,	schoollar,	scharar,	shoolar,
scollar,	scorlar,	scholer,	schroher,	shaller,
scooler,	scorl,	scholoor,	schote,	shallay,
scolla,	scolary,	schalar,	schoa,	shela,
scolle,	scorlor,	schalor,	schor,	sochar,
scollo,	scooler,	scholler,	schar,	sohlor,
scollor,	scorler,	schollor,	schoar,	solars,
scollere,	scloror,	schallar,	schooar,	solar,
scoblar,	sclow,	schaller,	schoal,	Sollar,
scoer,	scroaler,	schallor,	schoaler,	Soller,
scllar,	scollar,	schoolen,	schooiour,	solocar,
sclar,	scollare,	scheler,	schulier,	solor,
scllor,	scorllor,	schler,	school,	Soler,
scotler,	scoller,	schlire,	scholorer,	sollor,
scallar,	scoollor,	schller,	schouler,	sallar,
scaller,	scullier,	schole,	schorar,	saller,
scallor,	schoolar,	scholr,	schoorar,	salbor,
scallas,	schooler,	schols,	schotler,	saaol,
SColor,	schoolor,	scholse,	skooler,	saoler,
scaler,	schorlar,	scholae,	skollar,	secoler,
scolor,	schollar,	scholal,	skolar,	selor,
scalere,	scholor,	scholas,	skoler,	soci,
scoolar,	schoalar,	scholes,	skoller,	Stola,
scoolor,	schorlor,	scholla,	skorler,	roua.
scolai,	schoor,	schollaa,	skuler,	
scolal,	schola,	schollie,	stoler,	
scotra,	schooloer,	scholliar,	shoar,	
scorlorr,	schlar,	schoola,	sholar,	
scarlar,	scholaa,	schoole,	shollar,	
scarlor,	schol,	scholare,	shollor,	
scrollies,	schlor,	scholore,	sholer,	
scoaler,	scho,	schaalore,	shlar,	
scolar,	schoer,	schoorlar,	shorloir,	

But perhaps the greatest ingenuity is displayed in the spelling of the word "depot," a word, if not a place, daily in the presence of most of the children of the county.

For the spelling of this word the pupils have invented the following ways:—

bepo,	deapho,	deapo,	deappow,
beapo,	deaphow,	deapoe,	deapto,
dapa,	depto,	deapohl,	deopy,
daper,	depoirt,	deapohoe,	despot,
dapo,	deop,	deapon,	deupo,
dapot,	deopo,	deapot,	dipo,
deapot,	deopot,	deapow,	doopo,

dopho,	dephoe,	nepow,	depote,
dedpod,	depo,	tepot,	depott,
deepo,	depoa,	teapot,	depow,
deeper,	depoe,	depore,	depper,
depa,	dopot,	deport,	deppot,
depe,	deto,	de Port,	deppowe.

Several attempts to substitute "station" for "depot" have resulted in a variety of forms: "stachan," "stacion," "stai-tion," "stachant," "stachion," "stashun," "stasin," "stating," &c.

Little attention appears to be given in the schools of the higher grade to the well-established and quite common rules for spelling; such words as "denies," "detering," "fitted," "taking," "disputing," "deciding," and "changeable," are generally no better spelt than the words "deluge," "decency," and "colonel." The spelling of a noun in the possessive case is too frequently incorrect.

A very large number of errors result from indistinctness of articulation, and from mispronunciation, or from coincidence in sound of word or letter: the pupils spell as they pronounce. Where they write words but seldom, these errors are frequent. The following from papers of both grades, are examples:—

*Words misspelt on Account of Errors in Pronunciation,
Coincidence in Sound, &c.*

<i>Any, ane, enny.</i>	<i>Birth, birt.</i>
<i>Affectionate, effectionate.</i>	<i>Book, bok.</i>
<i>Age, edge.</i>	<i>Boston, bostone.</i>
<i>Against, aginst.</i>	<i>Brother, brouther.</i>
<i>Along, alond, alon.</i>	<i>Both, bouth.</i>
<i>Albany, alburny.</i>	<i>Boy, poy, bou.</i>
<i>Amongst, amunt.</i>	<i>Carriage, cridge, &c. (Previously given.)</i>
<i>Animals, anables.</i>	<i>Character, caricter.</i>
<i>Answered, answared.</i>	<i>Chance, chanch.</i>
<i>Appoint, point.</i>	<i>Chose, choosed.</i>
<i>Arithmetic, rithmes.</i>	<i>Change, chained.</i>
<i>Arrive, awrith.</i>	<i>City, sitty.</i>
<i>Ask, ast.</i>	<i>Close, clost.</i>
<i>Asked, asted.</i>	<i>Coasting, costin, coistain.</i>
<i>Because, becouse.</i>	<i>Closed, clost.</i>
<i>Been, ben, bene, bin.</i>	<i>Coat, coot, coth, cote, goat, coate.</i>
<i>Beautiful, beuful.</i>	<i>Come, cone.</i>
<i>Big one, big yon.</i>	<i>Consent, conset.</i>
<i>By and by, bimeby.</i>	

<i>Coming</i> , comin, commun, gommimg,	<i>Eggs</i> , ages.
commimg. (The last quite common.)	<i>Elbow</i> , elboa.
<i>Colony</i> , colonry, colnory, colonly,	<i>Every</i> , evry.
colomol, condley, conly, conley,	<i>Everything</i> , everthing.
connelly, conry, cornley, &c.	<i>Evening</i> , evning, eveings.
<i>Cousin</i> , cusing.	<i>Evil</i> , eval.
<i>Custard pie</i> , custed puy.	<i>Elephant</i> , eliphant.
<i>Decide</i> , discide.	<i>Enjoying</i> , enjoyern.
<i>Decision</i> , dision.	<i>February</i> , Febuary, &c. (Previously given.)
<i>December</i> , decendber.	<i>Fishing</i> , fithing.
<i>Determined</i> , dertimg.	<i>Friend</i> , phen.
<i>Disposition</i> , dispostion, dispotion.	<i>Frightening</i> , frighting.
<i>Daughter</i> , dorter, doughter.	<i>From</i> , fron.
<i>Dear</i> , deer.	<i>Going</i> , goin.
<i>Educated</i> , edcated, eddicated, ede-	<i>Going to</i> , gointer.
cated, egucated; edjucated, ju-	<i>Good deal</i> , goo deal.
cated, &c.	<i>Good</i> , goot.

The temptation is strong to extend this list, as I might do, through the alphabet. Most of the words are so common, and appear so simple, that they are quite likely to be overlooked by the inexperienced teacher.

I will venture to give a few additional forms, some of which have proved puzzles in the work of examining the papers; thus:—

Pencle, hotail, yourse, hoapink, hotaill, thanks Gifen, ogin, ogine, quarling, severl, smawl, Marchusses, toalt, masers, Usted, Yousted, Yock, splensy, wanter, thair kink, meachu, New Lin Cling, ol cone, auter, wasant, vestan, ferthur, ihed, trewly, perients, vere.

This class of errors as bearing upon the speech and reading of the pupils, as well as upon their spelling, is very suggestive. Errors of the kind are almost limitless, and not confined to any one part of the county, or to either grade of the schools. Some can be excused, having their origin in the foreign nativity of the children or their parents.

There is no other way so good for discovering these errors as to have frequent written exercises; the quick ear may detect the errors, but the eye is a more certain means, and the pupil who has formed the habit of mispronouncing or of misspelling the words will need to be corrected many times before he will pronounce and write them with accuracy.

The analysis of words by sounds must tend to diminish this

class of errors. My observations were not made with sufficient care to speak of the results in spelling in the schools using the phonic analysis. It has a marked influence upon the reading, and no doubt has also upon the spelling.

The excellent results reached by some of the schools justify specifying the details and the philosophy of their methods. Those schools in which reading is taught by showing the pupil the word, and requiring him to write it upon the slate before spelling it out orally, evidently secure the best results. The reason seems to be that the pupil, seeing the word as a whole, and making it, gives a more prolonged attention to the arrangement of the parts; a more definite and so more lasting impression is thus made upon the mind. In one of the towns of the county, oral spelling has of late been entirely abandoned. Oral spelling has its uses, but it may safely be subordinated in the early part of the course; the lowest classes in the schools of the town referred to certainly excel as spellers.

In another town the children have no oral spelling till the third year. That town ranks highest of any in the county in spelling. Here the uniform method in teaching words is to present them upon the blackboard in script letters. The pupils learn the words as they do the letters, by seeing and forming them many times upon the slate or board. The results, in these and in other towns that pursue the same plan in whole or in part, confirm the theory long held by the most experienced educators, that the object and word method of teaching beginners to read, with the constant exercise in writing, is the best means of making good spellers.

Evidence upon this point is also found in the fact, that, in towns that have changed to the word method within three or four years, the younger members of the upper primary classes spell words they have seen but once, better than the older members of the class, who were taught by a different method. The powers of observation seem to be better trained by the object and word method. To show the want of this training in the schools, an illustration may be taken from the spelling of the word "Cyrus" by the pupils of the grammar schools. In the reading of the narrative, this word passed under the eye of each pupil several times, but a few minutes before he wrote it, and yet there were a score or more of different ways of spelling it in the written exercises. Among these were, Ceyrus,

The pupil can be taught to leave a proper margin, and to divide his words when he has occasion to do so, as at the end of a line, between syllables. He may also at an early age be taught to make a proper selection of words and arrangement of clauses; and if correctly trained he will be able to avoid ungrammatical forms of expression, and to use language with some propriety as to style. At least, the teaching should tend to produce these practical results.

The exercises submitted in the examinations of the schools were designed to test the ability of the pupils to do the mechanical part of composition-writing. The letter written by the lower-grade pupils tested their knowledge and skill in placing the date, address, and subscription, in using the proper address and complimentary expression, and in arranging in proper form the body of a letter; it tested their handwriting, their knowledge of the use of capitals, of spelling, of syllabication, and a few marks of punctuation. Beyond this the pupils were left simply to make a proper use of words in sentences in expressing thoughts created by their own imaginations and suggested by the experiences of common life. As a test the narrative written in the upper grade was not essentially different in kind; the result depended upon the judgment rather than upon the imagination, and required a little more knowledge of mechanical arrangement, for example, in placing the marks of quotation.

In many respects the schools, and the individual scholars of the same school, showed the greatest contrasts; while some schools were fully supplied with all the materials for the written exercises, pencil or pen, paper and ink, — the pencil, ink, and pen in good condition, — others were wanting in all materials for written exercises, except the slate and pencil, which are generally found in all the schools of the grades examined. In a majority of the schools the materials which the examiners went prepared to supply were put in requisition. The absence of even the materials for written work, in so large a number of the schools, is too significant a fact to need any comment: it has an evident bearing upon the question of supervision.

In the mechanical execution of both the letter and the narrative, there was the same contrast in different schools as has been indicated in the materials for writing. With some the exercises seemed nothing unusual: the margin required, the date, address, &c., of the letter, and the title of the narrative,

received attention as if they were matters of course. The pupils of some schools, after the materials were placed in their hands and the directions were given, sat in apparent amazement, as if the most unreasonable demand had been made upon them: to some, indeed, the directions were at first incomprehensible, and had to be many times repeated. Nor was this condition limited to the lower grade of pupils. Some even of the grammar grade, after dipping the pen in ink, had nothing to write, and finally returned the paper, except for a few broken sentences, as blank as when it was given them. Very many of both grades gave evidence that they had never been taught even the mechanical part of any composition-exercise: their spelling was poor, capitals were wholly wanting, and no punctuation was attempted; there was no idea of the arrangement of parts of the letter or of the narrative. This is evident in the papers of which facsimiles are given later on in this report.

To show how little attention is given in many schools to one important particular, syllabication, the following words, occurring at the ends of lines, have been taken from the written exercises. The division made by the pupils is indicated by the hyphen; thus:—

al-ong,	evenin-g,	judgme-nt,	shou-ld,
bo-ys,	exchan-ge,	la-nd,	sma-ll,
bo-y's,	excha-nge,	mu-ch,	sm-all,
bef-ore,	goin-g,	pa-ssing,	stro-ng,
carria-ge,	goi-ng,	pr-esent,	too-k,
comm-and,	go-od,	pon-d,	thou-ght,
comin-g,	goo-d,	propose-d,	inju-stly,
ch-ange,	ha-ve,	punis-hed,	wante-d,
dec-ide,	ho-me,	sa-id,	wrig-ht,
dec-i-ded,	ho-use,	sai-d,	we-r-t,
dec-id-ing,	huma-ne,	sch-ool,	wh-en,
educate-d,	judg-e,	shoul-d,	wo-uld, &c.

With the exception of a number of schools that are well trained in this respect, the want of attention to syllabication is apparently a general fault.

The proper use of capitals seems to be neglected in a very large majority of the schools till the pupils enter the grammar grade, and sometimes till a late period in that. Where the pupils early learn to make the proper use of the capital letters, very few errors are found in their written exercises when they

reach the grammar school; some of the narratives, and even the letters written in the primary grade, are models in this respect.

But punctuation is the most neglected of any thing in the mechanical part of the written exercises; though there are a few towns in which most of these marks are employed with an approach to accuracy by children nine or ten years of age. The absence of these in a great number of the papers has materially increased the labor of examining and marking; it is often quite impossible, without several readings, to discover the meaning of the writer.

It would seem that letter-writing would be one of the early forms of elementary composition taught in the schools, since its practical value is so easily comprehended by the young learner. All that relates to the forms is so nearly mechanical that it can be easily taught.

For want of the proper training in this kind of composition exercise, the letters of those children who have had occasion to do some writing in a practical way, abound in such expressions as:—

“I take my pen in hand to let you know;” “I take my pence in hand;” “I thought I would write you a few lines;” “I now set down to address you;” “I now sit down to pen you a few lines;” “I write you these few lines hoping to find you in good health;” “Hoping this will find you in good health as it leaves us at present;” “It is with the greatest of pleasure that I now take up my pen to let you know that I am in good health, and hope this may find you enjoying the same blessing;” “As I have a few minutes, I thought I would write to tell you that I am in good health, and hope you are enjoying the same blessing;” “This is all I can think of, so no more at present;” “I can think of no more to write, so will close.”

A large number of the letters addressed “dear father,” or “dear mother,” close with “yours truly,” “respectfully yours,” and several with “your affectionate brother.” Not a few state as the cause for writing, that they “have nothing else to do;” thus: “Dear mother: I thought as long as I was setting here doing nothing I would write you a few lines;” “I thought I would write you as long as I had nothing else to do.”

Throughout, the letters employ a few special adjectives for limiting a great number of different nouns; thus: “a good time,” “a good long vacation,” “a good scolding,” “a good licking,” “a nice skate,” a “nice visit,” “a nice time,” “an awful

nice day." The word "nice" is frequently found two or three times in a short letter: it is employed several hundred times in all that were written; and the word "splendid" is used to express every form of pleasing emotion, and every kind of thing which excites it: thus we have "splendid sleigh-rides," "splendid teachers," "splendid times," "splendid pies," "splendid coasting," "splendid butternuts," "splendid days," "splendid paper," "splendid luck," "splendid weather," and "splendid potatoes."

Letter-writing presents the occasion for the exercise of feelings of friendship and filial regard; it affords an opportunity for teaching the pupil to apply those expressions of respect and endearment, which, if they do not naturally arise from the pupil's own feelings, must, by their appropriate use, tend to awaken in him emotions to correspond with the expressions he employs. Where letter-writing is common in the schools, the polite forms of expression contrast most agreeably with the language where the children are not habituated to it. In one town where letter-writing is prominent as a primary-school exercise, the letters are crowded with happy expressions which indicate a corresponding spirit and temper, occasioned, no doubt, in part, by the exercise itself. On the other hand, there are entire sets of letters in which such expressions are rare; while there are many which by their coarseness offend every feeling of delicacy, and indicate the absence of all refinement in the writers. What numerous occasions written exercises would present to the skilful teacher for refining away the dross of the rude material upon which he so often is called to work!

The papers of some schools abound in such expressions as the following:—

"The other boys made him their boss;" "I am having a boss time" (addressed to "grandmother"); "He always wanted to be boss;" "He liked to be boss;" "He give the umpire a thrashing;" "He thrashed me;" "He flogged me;" "He said he had been flogged;" "He punched him;" "He got lickin';" "He went for him;" "He come for me;" "He said he had learned a licking;" "I have learned to get a leaking;" "Master licked me;" "What did he lick you for?" "Master beat him;" "There was two boys fussing about some coats;" "This made the larger boy mad."

The following, though less uncouth and offensive, are still wanting in delicacy:—

"You come in a sley after me" (addressed to "farther"); "You have the horse to the depot" (addressed to "father"); "Bring the horse to the depot for my trunk" (addressed to "mother"); "Send a sleigh to meet me at the depot;" "I want you to come to the depot;" "Fetch up a sleigh to the depot."

The following illustrate the use of strong language:—

"The big boy said to the little boy to swap with him;" "The big boy grabbed hold of the coat and flung his to him;" "He wanted to trade;" "They wanted to swap coats;" "Persian was raised with a lot of other boys;" "They were jangling over their coats."

In contrast with these are such expressions as the following:—

"I was punished;" "The small boy would not consent to the proposal;" "I should be glad to have you come to the depot to meet me;" "Send the carriage, please, to meet me;" "I hope you will be able to meet me;" "Please send to the depot for me;" "I would like;" "Please come," &c.; "I am very happy here, dear mother."

Who can fail to discover a widely different spirit in the writers of the following two letters written by boys in the primary grade?

LYNN jan 29th 1879.

DEAR MOTHER,— I am coming home Saturday. Send a sleigh to meet me at the depot. I had a good fight you bet.

[Signed]

LYNN MRS'

Jan 12 1879.

im comming home dear mother and im liveing very happy and i want you to meate me at the providense rode

[Signed]

The penmanship of the first of these letters was marked fifty per cent; of the second, twenty. The children were about of an age, between nine and ten years. Could time be more profitably spent by the teacher, than in calling out the sensibilities and correcting the uncivil habits of one of these pupils, and in helping the other to clothe his gentle thoughts in correctly formed words?

The papers of an entire school, in a few instances, were characterized by a formal and stilted style of language, which exactly expressed the whole air of the school; others showed a heartiness and simplicity that were charming, and at times almost betrayed the examiners into forgetfulness of the errors

the children were making. In a few instances, there was a freedom of manner which created a seeming indifference to the results of the examinations. Sometimes this spirit manifested itself in verbosity, and the words used were quite out of proportion to the ideas expressed. An illustration of this is found in the narratives, where in twenty lines, which is the average length, not half the story is told. The last named fault occurred so seldom as to be hardly worth mentioning. It is a fact, however, I think, that in the schools where "language lessons" are most taught, the children are liable to disregard the thought, and multiply words merely for the sake of the expression. It may not come amiss to repeat the hint already given, that the teaching of language implies something more than teaching to use words: it necessitates first the teaching of that which the language names and describes. Language should not be mistaken for an end in itself: the end is the thought, and language is for the expression of that.

Among the papers taken in the upper grade, there are many in which the pupils show a clear appreciation of the story, and good judgment in seizing upon and in arranging the important incidents of the narrative; and yet the style is poor, the expressions are ungrammatical, the writing is cramped, and all that relates to the mechanical execution shows faulty or neglected early training. For want of these simple and easily acquired elements of primary instruction, the writer is often placed for life at disadvantage with persons who have far less genius, but who have power to express what they know. Intelligence wanting the means of expression enlists our sympathy far more than shallowness which drapes itself in a frippery of words.

The grammar of the exercises is generally conformed to the habits the pupils have in speaking the language. In the papers of both grades a few errors are committed over and over again, thus:—

"The was two boys;" "They was two boys;" "How is all the boys?" "Things that was good;" "They is not many here I know;" "He give him his coat;" "He come to school;" "I see him yesterday;" "He asked Cyrus what he done that day;" "I seen the boys disputing;" "I had saw him;" "He had wore a coat;" "Who teached him;" "He throwed his coat;" "He said each one keep their own coats;" "Who the coats fitted;" "Who it would fit best;" "Boys which he was taught by;" "Two boys which were disputing;" "He had ought to decide;" "He hadn't ought," &c.

The above embrace nearly all the forms of ungrammatical expressions that have been noted in the examination of the three or four thousand papers; the errors are limited to the use of the wrong form of the verb in number or tense, and the wrong form of the relative pronoun, or to the use of the wrong word. There are, in addition to these, errors in the use of words, which are sometimes classed as errors in grammar, thus:—

“Boys with whom he played with;” “I was to Boston;” “I said for the little boy to have the little coat;” “I said that the big coat for the big boy;” “Have the sleigh to the depot;” “Cyrus was learnt every thing;” “They tried to learn him.”

The word “got” is often erroneously used, as: “I got a punishing to-day;” “got whipped,” and so on. And, as was illustrated under errors in grammatical expression above, *the* and *they* are often used for “there.”

These errors, which are repeated, one or other of them, hundreds of times in the papers examined, show that the study of grammar fails to teach the pupils “to speak and write the language correctly.” The errors occur almost as frequently among those who study grammar, as among those who do not. The kinds of errors are few, though so often repeated. To avoid them, the pupil must learn, not by committing rules of grammar, but by practice in writing. The correct forms of language are to be acquired, if acquired at all, before the pupil is old enough to study the rules of grammar. The business of the primary school is to furnish to the pupil the occasions for using all those forms of language in which he is likely to err, and to practise him in the correct forms till he employs them from habit. The knowledge of grammar will furnish him with some rules for testing his own construction; but not till his habits are well formed in the use of language, will he have the judgment to apply the tests critically.

The lesson taught by the examinations is, that in most of the schools the children should begin earlier, and have vastly more practice in composition-writing.

ARITHMETIC.

The ends to be secured in the study of arithmetic are the knowledge of numbers and a certain kind of culture which the study is calculated to give. The method of teaching should be

such as to lead the pupil to form habits of accuracy and attention, and tend to discipline the powers of observation, memory, imagination, judgment, and reasoning. The first knowledge to be acquired in the primary school is of small numbers: the knowledge is of three kinds,—of the expression, combination and relation of numbers.

Under expression and combination are included the four fundamental operations. These and the solution of simple problems should be taught in the first four years. All that remains of arithmetic that is essential, including practical problems in mensuration and percentage, should be taught in the next four years. With these processes the pupil should be taught the most common and useful abbreviations for lightening the mechanical labor.

The examinations were designed to test the results of four years' and of eight years' work in the particulars above referred to. Accordingly to each grade were assigned an example in column addition, and practical problems adapted to the respective grades. The lower grade had also exercises in the elementary combinations, and the upper grade an example in multiplication and division, which tested the pupils' practical knowledge of cancellation. The results will be seen by reference to the tables which are appended. In the primary grade the average of correct answers for the whole county in elementary combinations was nearly 74 per cent; in the column addition, 46 per cent, and the total average was 60 per cent. In the grammar grade the average for the column addition was 65.7 per cent; for multiplication and division, 68.8 per cent; for simple interest, 42.9 per cent; for the problem in mensuration, 15.4 per cent. The total average was 48.2 per cent; and the average for cancellation, 13 per cent.

Compared with the results reached in some of the schools, these averages are low. There is no good reason why the county as a whole should not stand at least twenty per cent higher. This would give an average of two per cent less than the highest town has at present: it would be but little above the average of some others. While some schools made a satisfactory record, and while the majority of the towns stand fairly, the results in others are not particularly gratifying to our pride as teachers of arithmetic.

Whence arise these differences? There is in the first place

a wide difference in what is attempted to be taught. In some schools, during the first four years, the practice is confined to the exercises of the mental arithmetic. That, with its formal solutions, is literally committed to memory. The ciphering is not begun till the fifth year. Up to this time the pupils are not able to add units and tens expressed in column. In other schools the pupils cipher through the fundamental operations, even before they enter upon the fifth year.

To reach the standard of work attempted in some of the schools of the primary grade, the examination should have been limited to the primary tables, and then the results could only have been expressed orally; while to reach the higher standard in other schools would have required tests in all the fundamental operations, and quite difficult problems in mental arithmetic, with compound numbers.

The pupils of the grammar grade were as far apart in respect to the work attempted, as were those of the primary; some who had been eight years in school having advanced but little beyond the fundamental operations, while others had only reached fractional numbers, and yet others had gone through the arithmetic required for admission to the high school. The pupils of one school — all under twelve and a half years of age — had been through written arithmetic preparatory to entering the high school. Of course the work was very superficial: the pupils examined in this school averaged, in addition, 50 per cent; in multiplication and division, 0 per cent; in interest, 50 per cent; in mensuration, 0 per cent, — a total of 25 per cent. In a few cases the tests for the primary grade, with the example in division or with a simple example in fractions, were submitted to the grammar grade, and found to be fully up to their attainments.

Formerly — say, twenty-five years ago — the practice in numbers, for the first four or five years in school, was limited to the oral and mental arithmetic. That practice, as already stated, is still continued in some of the towns. The drift of late has been towards mechanical ciphering; the use of figures being early taught, and the oral solution being entirely abandoned. In some towns these methods are both practised; the children having set lessons in written and in mental arithmetic, and carrying on the two studies as if they were entirely distinct. Here are three methods; and of the old doggerel, —

“The first is the worst,” &c., —

the first two lines are directly, and the last two inversely, applicable: for among the methods there is little to choose.

A more rational method prevails where the mental process is early expressed in figures, and reason for the written process is made clear to the comprehension of the pupil, who begins in school the practice he is to follow in life: he there combines as he expresses, and expresses as he combines. In this there is no divorcing of things which are by nature joined together.

There are two methods in use for teaching the elementary combinations. By one the whole reliance is placed upon committing to memory the primary tables; by the other, all numbers to twenty, with their combinations and relations, are taught with sensible objects. The one process closes the mind to the thought, and occupies it with a form of words; the other first develops the thought, and then teaches to express it in appropriate forms. It is not hard to see which will give the best conception of the elementary facts of numbers.

Again: there is much study of book arithmetic, but a great neglect of training upon miscellaneous problems outside. The arithmetic is of the schoolroom, not always of practical life. The pupils work to get a certain answer, which is appended to the problem. Failing to obtain this, they erase and cipher again; again they fail and again they cipher, till this play with figures makes arithmetic a farce; the practice is bad for the knowledge, and damaging to the mental habit, if not to the moral sense. If, instead of this, the pupil should be compelled to deal with real things, and to find his answer by studying the conditions of his problem, the fiction which arithmetic now is to most pupils, would become to them a reality. Confined to the book and its answers alone, the pupil is often unable, when he leaves school, to do the simplest practical problem; and this is because he has had no practice in this kind of work, and no training which fits him to do independently work of any kind. That he may be able when he leaves school to apply his knowledge, he must be accustomed, while in school, to weighing and measuring, and generally to finding the data for his own problems, and, with these, to working out results unaided and alone.

To one who has not been used to seeing similar results elsewhere, the failure in the simple operations is perhaps the most surprising thing in the examinations. Certainly, to have a fail-

ure here is most serious in its consequences. There were but nine items given for addition in the primary, and but eleven in the grammar grade; with a total average of fifty-six per cent. Why should not eighty or ninety per cent of all the answers be correct? The operation depends upon the simplest elementary combinations; and of these there is a limited number. Good teaching in the primary schools would, in the first two or three years of teaching, fix these fundamentals of arithmetic so firmly, that, no matter what the application, the accurate result would be nearly certain.

The practice with these small numbers should be so thorough in the primary school, that any collection of objects not greater than eight or ten could be recognized and named at sight, and that the presence to the pupil of any pair of numbers whose sum is not greater than twenty, should at once suggest to the mind the amount; or, the amount and one of the parts being present, the other part or difference should be at once suggested. So, whatever the form of language expressing the unions or separations of these elementary combinations, whether words or figures, the results should spring instantly to the mind without the necessity of counting by separate units. With proper training at the outset, the counting with fingers, not uncommon even in the grammar schools, would be nowhere found. In place of this thorough elementary drill, I saw, in a school visited since beginning this writing, the children attempting to recite from memory the rule for finding the greatest common divisor,—a rule which they did not comprehend, and which would be of no great use to them if they did comprehend it. A single instance proves nothing; but this is an illustration which is applicable to many schools.

I was not prepared for so great a per cent of errors in using abbreviated processes as was found in the grammar schools. The papers do not always show what the process was; but evidently the number who abbreviated the work was quite small. The direction to find by the shortest process the result of multiplying a given number by 12 and dividing the product by 72 would seem to suggest dividing by 6 to all pupils who had been taught to cancel; but, instead, many pupils, after multiplying by 12, divided by 72, using short division. If the pupils had been told to do the work by cancellation, there can be no doubt the errors would have been few. As it was, the

percentages for "short process" were not included in making up the averages for the grammar schools.

Another illustration of the want of practical methods in arithmetic occurred in connection with the example in simple interest. The problem given required the pupils to find the time, for example, from Aug. 20 to Dec. 5 of the same year; the pupils in a majority of the schools wished to know the year; and, with most, the time was found by writing down the dates one underneath the other, — year, month, and day, — and performing the operation by compound subtraction. In examining the papers, it was found that many errors in finding the time arose from misplacing the dates, and attempting to subtract the later from the earlier.

It will be seen, by referring to the table of percentages, that the lowest per cent for the examples was obtained for the problem in mensuration. This was given to test the power of the pupils to conceive the form described, and to learn if they were in the habit of constructing diagrams to aid their imagination. The problem was such as is likely to occur in practice, and was not difficult. After repeated explanations and illustrations, some pupils seemed to despair even of comprehending the problem; others proceeded at once to draw a diagram, and then with a few simple operations worked out the result. Where the pupils made diagrams for their example, the work was generally found to be correct.

While some schools were very exact in expressing arithmetical processes, others were equally careless. A common fault is illustrated in the following examples: —

$$(1.) 5337 \times 12 = 64044 \div 72 = 889\frac{1}{2}.$$

$$(2.) 4 \times 2 = 8 \times 4 = 32 \times 2 = 64 \times 4 = 256 \times \$10 = \$2560.$$

$$(3.) 3 \text{ mo. } 15 \text{ da.} = .0175 \div 6 = .0029\frac{1}{6} \times 8 = .0233\frac{1}{3} \times \$5337 = \$124.49+.$$

Such are the contrasts under different kinds of training. No branch taught in the schools more fully shows the kind and quality of the teaching than arithmetic. If the teacher has definite ends to reach, and has the requisite knowledge and skill, there is no branch where the good results can be more evident. Being without aim, and ignorant of methods, there is no branch where the teacher can do so much to so little purpose.

The question of morals has its place in the teaching of arithmetic. Moral power is the result of moral acts. Do nothing to prevent one pupil from copying the work of another and presenting it as his own, and the result will be a weakening of the moral sense, as well as a want of self-reliance. In quite a large number of the schools the desire to compare and copy was so manifest, that the mind sickens at the thought of the consequences of this bad habit acquired in the study of an exact science.

The method of the examinations was a little embarrassing to many pupils, because they were forced to rely each upon himself. If similar conditions are imposed upon the pupils in all their exercises, they will soon gain facility in doing independent work. With this facility comes pleasure, which always waits upon achievement. This prompts to renewed exertion; and finally a character results having an inclination to moral acts. The pupil comes to feel an obligation to discover and state the exact truth in arithmetic as elsewhere, even to the writing down of a figure; and something like shame is felt, if, for a fault of his, one of these easily written symbols has to be erased.

With the exceptions mentioned, there is to one experienced in similar work nothing surprising in the failures revealed in the examinations. They result partly from a want of thorough drill in the first steps in numbers. They indicate, however, defects in teaching which can be remedied only by a knowledge of the powers of the mind to be trained, and skill in using methods calculated to bring the powers into exercise.

GENERAL REMARKS.

Tables A and B, which follow, are made up from the returns of the committees in the several towns, and from their written replies to a circular addressed to them last November; the questions contained in the circular are published with the explanations of Table A. The object of introducing the tables is to furnish the means of making some comparisons not strictly within the province of the report. Should one wish, for example, to study the method or the cost of superintending the schools in connection with the results of the examinations,—should he wish to find the cost *per capita* of the supervision, or of the instruction of the pupils examined,—he can, with these tables, make the necessary comparisons. With an addi-

tional item, — the school-population, contained in the statistical tables of the report of the Board of Education, — he can also see what proportion of children within the proper limits as to age were presented for the examinations, and from this determine approximately the character of the grading in the schools. Tables C and D need no explanations.

The reasons for designating the towns by the letters of the alphabet, and the schools by the numerals, were principally these: first, the mind would not be so likely to turn aside from the results to the individuals, as if the names were given; and, second, the object being to ascertain the results in the schools and towns as parts of the county, it seemed not necessary to use their names. Still, that the towns and schools that rank high may be known and studied by teachers and committees, an index is prepared, which, on application, will be furnished to committees whose schools were examined.

The lithographs which follow the tables are samples taken from the two grades of schools. They represent principally three kinds of written work, — the best, the poorest, and the average. The four "best" letters are selected from the best seventy-five to one hundred letters written in the county, and the four "poor" letters are selected from the poorest seventy-five to one hundred. The four "best" and four "poor" narratives are selected on the same principle.

The average-papers are selected by taking, from all those written in a town, one paper which most nearly represents the average of the town in the items entering into the average of the papers. These samples are designated by the letters of the respective towns, and marked "av." They are arranged in order according to the rank of the towns in this kind of work. The differences in the average-papers are so slight, that, as a whole, they may be uninteresting to the general reader. There is no wish to impose the task of reading them upon any one, unless it be, that, by reading forty or fifty, he may have some appreciation of the labor of reading critically, for several times, the whole three or four thousand.

The examinations suggest many topics which it would be profitable to consider, had not the report already transcended its limits. I cannot close, however, without a brief reference to the influence which methods of teaching exert upon the intellectual and moral character. I am prompted to this by

the many apt illustrations which have come to my notice. I will allude to but one. While my visits were for the purpose of examining the schools in the branches taught, in my notes taken in a town where rational methods of teaching prevail, I was led to say, "I am struck with the conscientious and thoughtful spirit of the pupils in all the schools." Had this been the only compliment to the teaching in that town, it would have been the highest that could be paid, no matter what the percentages obtained. The good spirit of the children was, however, fully matched by the excellence of the results of their examinations.

However important may be the knowledge of reading, writing, and arithmetic, that knowledge sinks into insignificance in comparison with intellectual and moral training. But the effect of my observations in all the schools has been to strengthen the conviction, that the teaching best adapted to increase useful knowledge produces the truest culture of mind and heart.

My experience in other schools for a number of years leads me to the conclusion, that the schools of Norfolk County are not, as a whole, better or worse than similar schools in other parts of our State. The conditions which make schools poor or good are the same everywhere. Their failures result from poor organization, insufficient appliances for teaching, or from the teaching itself. These in their turn result from inadequate support and from an ineffective supervision. The examinations clearly indicate that more depends upon the supervision of the schools than upon all other causes combined. It will be said that the teacher makes the school. True; but the teacher is found or made by the supervisor. An important duty of this officer is to seek the best teacher the market affords; assign him to his place; help him to plan and organize, to remove obstacles without and within. It matters not whether he be called committee-man or superintendent, whether he be paid or unpaid: his success or failure in this kind of work will appear in the teachers and in the schools, and be, more than any thing else, a test of his fitness for the office.

But, it may be asked if the means are inadequate, what can the supervisor do? It will generally be found that wherever there is good supervision the means are not inadequate. Good supervision implies liberality in providing, and economy in administering. But, without the means to employ high-priced

teachers, it becomes a far greater necessity, to secure effective supervision. How else are the untried teachers to be shown the best methods? How else are the children to be saved from becoming victims to teaching which is based neither upon training nor experience?

The supervisor of schools has an important duty yet to perform in securing better grading; in the county as a whole the examinations show that the average rank of the older class of pupils in graded schools is nearly 12 per cent higher than that of the same class in mixed schools. No estimate has been made for the lower class; but without doubt the difference is still greater.

While it is probably true that the schools of Norfolk County do not differ on the whole from schools elsewhere, there is a most gratifying interest awakened in most towns of the county in methods of teaching, in courses of studies, and in school supervision, which gives great promise for the future. One important cause for this awakening is the earnest spirit which has actuated the association of school committees of the county in everything they have undertaken. It will be a high honor if my effort in any way advances the ends the association has in view.

By throwing their schools open to the public without reserve, as they have done in these examinations, the committees have invited criticism. It will undoubtedly be liberally bestowed. But, if the motives that prompt the criticism are as sincere and noble as those which have presented the occasion, Norfolk will not be the only county to receive a blessing.

NOTE. — Since the plates for this edition were cast, it has been decided to print the average lithographs referred to on page 170 for a few of the towns only, including some of the highest and some of the lowest in rank.

EXPLANATION OF TABLE A.

On the following pages is a table showing the method and average annual cost of superintending the schools of the several towns in the county for the three years previous to the examinations.

For convenience of arrangement, there is also placed upon the same page a condensed table of answers to the following questions, submitted to the school committees in the several towns:—

I. What method was used in your schools by pupils who are now nine or ten years of age in first learning to read? State whether it was the *A B C*, the *phonic*, or the *object and word* method.

II. What method is used at present in teaching beginners?

III. Were those who are now nine or ten years of age first taught to make words in Roman or in script letters?

IV. Are Roman or script letters used in teaching to read at the present time?

V. If your children are now taught by the word method, how early do they use the names of the letters of the alphabet in spelling or otherwise?

TABLE A. — Showing the Manner and Expense of superintending the Schools, and the Method of teaching Beginners to read.

Towns designated by Letters in the Order in which their schools were examined.	SUPERVISION OF THE SCHOOLS WITH ITS AVERAGE ANNUAL COST FOR PAST THREE YEARS.			METHODS USED IN FIRST LEARNING TO READ: A B C, OBJECT AND Word (O.W.), PHONIC (P.).		FORM OF LETTERS FIRST USED BY PUPILS IN MARKING WORDS: ROMAN (R.) OR SCRIPT (S.)		When Pupils who learn to read by Word Method first use Names of the Letters of the Alphabet in Spelling or otherwise.	REMARKS
	SUPERINTENDENT.		School Committee.	By Pupils examined.	Now used in Schools.	By Pupils examined.	Now used in Schools.		
	Exclusive.	Partial or Part Time.							
A.	\$500 00	O. W., P.	O. W., P.	R., S.	R., S.; some recently S. alone.	After 6 mos.	"If a A B C is used, it is done secretly."
B.	.....	.....	497 83	Various.	W.	R. generally.	S.	Early in most cases.
C.	\$2,000 00	.....	.....	A B C; some exceptions.	O.W., P., combined.	S.	S.	After 2 yrs.
D.	80 00	O. W.	O. W.	R.	S.	After 1 yr.	"Use names of letters in writing in first year." "A B C learned at home."
E.	.....	\$702 50	.....	A B C.	O. W.	R.	S.	After 1 yr.
F.	.....	.....	218 33	P.	A B C, P., W.	R.	Generally R.; one, S.	At first.
G.	400 00	W., A B C.	W., A B C, P.	R., S., early.	R., S., equally.	At first, or soon.	"All use script, and make good progress."
H.	85 00	.....	.....	A B C.	W., P. with teachers competent.	R. on board, S. in copy-books.	S.	Close of first year.
I.	.....	.....	123 41	A B C, W.	W.	R.	S.	After 6 mos.

J.	.....	212 16	All "probably,"	P., W., in graded; A B C in mixed. W., P.	R.	R., S.	"Cannot state."	"Majority learn A B C at home."
K.	.....	300 25	Various, O. W. by some.	W., P.	R., S. by some.	S.	Early as 2d term.	"After words are taught, they are analyzed by sound, and spelt by A B C."
L.	.....	800 00	O. W., P., combined.	O. W.	S. mostly.	S.	2d year.	"Those taught at home learned early to use A B C."
M.	.....	433 58	A B C.	O. W.	"Unable to say," R.	S.	3d term.	
N.	.....	412 50	A B C.	W.		R. mostly.	Early.	"Three-fourths taught A B C before coming to school. Instruct teachers to teach children to make all forms of letters."
O.	.....	64 08	W.	W. and phrase. W.	R. principally.	R., S.	Early.	
P.	.....	3-9 83	A B C.	W. in part.	R.	S.	After 1 yr. Early (?)	"No effort made to teach alphabet."
Q.	.....	282 00	A B C.			R., S., to great extent.		
R.	.....	73 33	A B C.	O. W. on trial.	R.	S.	Early (?)	"Cannot answer last question definitely."
S.	.....	93 16	A B C.	W., P., somewhat.	R.	S.	Never taught.	"No oral spelling in schools."
T.	.....	.....	P.	O. W.	R.	R., S.	After 6 mos.	
U.	.....	50 00	O. W.	O. W.	R.	S. mostly.	At first.	
V.	.....	30 00	A B C.	W., A B C.	R.	S.	Early.	
W.	.....	330 25	A B C, P.	W. principally.	R.	S.	Early.	"Children know their A B C when they enter school."
X.	.....	25 74	A B C at home.	A B C at home.	R.	R.	Early.	"One child in schools was taught by word method. Begin oral spelling at first."

TABLE B. — *Showing the Average Annual Expenditure, Number of Pupils to a Teacher, and Weeks of Schooling, for Three Years Preceding the Examinations.*

Towns Designated by Letters in the Order in which they were Ex- amined.	Average Annual Expenditure for the Three Years Preced- ing the Exami- nations.	AVERAGE WAGES OF TEACHERS PER MONTH.		Average Num- ber of Pupils to a Teacher.	Number of School Weeks per Year.
		Males.	Females.		
A . . .	\$20,583 08	\$115 33 $\frac{1}{3}$	\$46 18 $\frac{2}{3}$	31.6	40
B . . .	13,593 97	121 55 $\frac{2}{3}$	50 90 $\frac{2}{3}$	26.8	37-1
C . . .	25,166 66 $\frac{2}{3}$	116 77 $\frac{1}{3}$	46 40 $\frac{1}{3}$	38.4	40
D . . .	6,166 66 $\frac{2}{3}$	125 66 $\frac{2}{3}$	41 96	42.7	37-2
E . . .	10,913 33 $\frac{1}{3}$	92 29 $\frac{1}{3}$	39 97 $\frac{2}{3}$	43.4	38-4
F . . .	5,000 00	105 55 $\frac{1}{3}$	37 75	28.7	39
G . . .	10,567 76 $\frac{1}{3}$	77 58	35 59	44.2	34
H . . .	1,800 00	40 00*	31 79 $\frac{2}{3}$	22.7	31-3
I . . .	1,933 33 $\frac{1}{3}$	58 57 $\frac{1}{3}$	33 22 $\frac{1}{3}$	32.4	34-3
J . . .	5,666 66 $\frac{2}{3}$	77 16 $\frac{1}{3}$	35 85 $\frac{2}{3}$	31.8	37
K . . .	7,166 66 $\frac{2}{3}$	93 02	34 17 $\frac{1}{3}$	36.7	30-3
L . . .	13,315 29	123 66 $\frac{2}{3}$	51 25	24.6	40
M . . .	6,003 33 $\frac{1}{3}$	54 75 $\frac{2}{3}$	38 30	34.2	35-2
N . . .	5,500 00	70 20 $\frac{1}{3}$	33 83 $\frac{2}{3}$	24.9	30-4
O . . .	5,000 00	51 16 $\frac{2}{3}$	36 80	34.2	40
P . . .	23,600 00	104 42	35 69	36.8	38-4
Q . . .	7,050 00	92 50	35 24 $\frac{1}{3}$	33.2	40
R . . .	2,427 53 $\frac{1}{3}$	85 92	36 66 $\frac{2}{3}$	27.8	38-1
S . . .	5,352 50	125 15	36 01 $\frac{2}{3}$	23.8	37-3
T . . .	36,966 66 $\frac{2}{3}$	192 16 $\frac{2}{3}$	69 32 $\frac{2}{3}$	31.7	40
U . . .	16,933 33 $\frac{1}{3}$	113 55 $\frac{1}{3}$	46 19	41.9	40
V . . .	1,139 00	32 00	32 00	17.8	37-1
W . . .	9,333 33 $\frac{1}{3}$	106 93 $\frac{2}{3}$	36 61 $\frac{2}{3}$	38.8	38-2
X . . .	1,500 00	37 00†	35 61 $\frac{2}{3}$	23.8	33

* For one year.

† For two years.

TABLES OF AVERAGES FOR PRIMARY GRADE.

EXPLANATION OF TABLES.

THE letters of the alphabet designate the towns, and indicate the order in which they were visited.

The numerals designate the schools with the order in which they were examined.

The numbers expressed in the columns denote the percentages of correct answers given by the pupils reported.

The blank spaces indicate that the pupils were not examined upon items expressed in columns where the spaces occur.

NOTE. — The total average for each school was made up from the percentages in the branches in which that school was examined.

In making up the total average for the town, when the examination of a school in any branch was omitted, the school was allowed the percentage of the other schools of the town in that branch. In making up the total average for the county the same plan was pursued.

TABLE C. — *Report of Examinations of Children between Eight and a half and Ten and a half Years of Age who have attended School on an Average Four Years.*
 PERCENTAGES OF SCHOOLS AND TOWNS.

Towns, designated by Letters.	Schools, designated by Figures.	Average Age of the Pupils whose Work is reported.	Number of Pupils.	Addition in Column.	Mental Arithmetic.	SENTENCES.							READING.			LETTER.				Average Totals.		
						Punctuation.	Spelling.	SPELLING OF —			Mechanical Execution.	Expression.	Average.	Thought and Expression.	Spelling, Punctuation, &c.	Date, Address, &c.	Average.					
								"Which."	"Scholar."	"Whose."												
A.	1	Yr. Mo.	12	25	67	43	81	23	39	42	58	42	69	60	48	54	57	50	53	51	52	59.7
	2		7	57	51	50	61	39	56	71	100	43	60	75	64	69						50.6
	3	10-1	20	95	92	53	84	54	60	65	60	35	84	71	64	68						70.6
	4	9-11	23	70	72	55	89	72	59	70	48	70	89	50	50	50						67.4
	5	9-5	27	48	55	48	74	49	46	65	50	45	61	51	49	50						49.2
	6	9-5	1	100	50	30	86	50	30	0	0	100	75	45	50	48						42.2
	7	9-3	5	80	72	46	69	30	52	40	40	80	65	55	55	55						51.4
	8	9-9	3	0	97	47	91	50	63	67	67	33	83	70	60	65						62.3
	9	10-2	4	50	50	52	86	75	42	75	25	75	69	53	50	52						58.6
	10	9-9	6	83	98	56	95	71	75	83	67	33	92	62	58	60						76.7
	11	10-3	6	50	58	53	95	75	70	50	33	67	71	57	49	53						61
		9-9	114	61	70	50	82	54	54	63	51	51	75	59	54	57	50	56	51	52	59.7	
B.	1	9-8	13	54	78	47	91	46	68	62	69	62	75	51	52	52						62.4
	2	9-9	14	64	87	55	90	16	70	71	86	64	62	49	47	48						60
	3	10-0	14	61	81	50	75	71	56	79	57	36	61	67	59	63						65.2
	4	10-1	9	67	96	48	86	67	47	56	44	78	89	67	63	65						70
	5	9-5	1	100	100	50	57	0	40	100	100	100	50	63	57	60						56.3

	6	9-10	7	71	80	49	96	50	57	43	86	29	76	73	59	66	55	64	43	54	64.4
	7	9-5	5	40	66	56	97	65	40	40	20	60	65	57	54	56	62*	59	05	02	60
	8	9-11	6	50	83	50	90	58	65	83	83	33	87	43	46	48					64.2
		9-10	69	61	83	51	87	50	59	65	67	54	71	59	54	57	55	64	43	54	61.4
C.	1	9-4	31	43	79	79	100	93	89	87	80	87	86	88	92	90	70	89	80	79	82.3
	2	10-1	10	80	99	74	100	98	89	100	89	100	80	77	65	71	82	89	90	87	85.3
	3	9-6	34	56	87	74	99	99	96	94	79	100	93	84	69	77	74	85	82	80	83.2
	4	9-7	5	40	88	72	97	100	84	60	80	60	65	61	63	62	82	81	79	81	76
	5	9-4	9	78	92	74	100	100	90	89	100	100	97	86	78	82	84	84	91	86	87.8
	6	9-9	27	48	54	66	100	88	90	100	93	100	91	81	64	73	88	81	84	84	77.9
		9-7	116	54	79	73	100	95	91	92	85	95	89	84	74	79	78	85	83	82	82.1
D.	1	10-1	40	75	89	60	96	73	65	73	60	55	71	54	58	56	66	52	48	55	67.3
	2	9-7	6	0	33	38	63	25	28	67	33	50	63	46	48	47	60	60	61	60	43.8
		10-1	46	65	82	57	92	67	60	72	56	54	70	53	57	55	65	53	50	56	64.3
E.	1	10-0	27	52	73	66	97	86	74	93	52	78	62	67	65	66	69	81	76	75	72.3
	2	9-11	14	100	94	74	96	91	75	91	73	61	86	70	78	74	83	83	82	83	81.3
	3	10-1	3	33	90	56	100	58	70	67	100	100	75	70	72	71					69.3
	4	9-11	4	50	43	61	43	50	33	50	25	50	31	66	64	65					49
	5	9-11	8	0	61	55	77	28	60	88	75	88	59	69	67	68	34	57	10	34	48.1
	6	9-6	8	50	90	51	96	69	72	88	88	88	78	64	54	59	71	74	65	70	69.5
	7	9-6	19	26	35	60	95	83	59	74	47	74	63	44	41	43					56.2
		9-10	83	49	67	63	92	76	67	84	60	76	67	68	55	62	68	77	67	71	68

* For want of time letters were not written in these schools at the time of the examinations. The percentages here given are based upon letters written December, 1879, and hence are not considered in the average of the schools or the town; if considered, they would increase the average of the town about two per cent.

Tabular Report of Examinations of Children, Etc. — Continued.

Towns, designated by Letters.	Schools, designated by Figures.	Average Age of the Pupils whose Work is reported.	Number of Pupils.	Addition in Column.	Mental Arithmetic.	SENTENCES.						READING.			LETTER.					Average Totals.	
						Penmanship.	Capitals.	Punctuation.	Spelling.	SPELLING OF —			Mechanical Execution.	Expression.	Average.	Thought and Expression.	Spelling, Punctuation, &c.	Date, Address, &c.	Average.		
										"Which."	"Scholar."	"Whose."									
F.	1	9-11	22	55	98	54	75	36	70	68	77	85	87	42	46	44	59	62	59	60	61.9
	2	9-10	13	69	63	49	56	33	46	54	45	15	65	41	40	41	30	45	34	36	47.6
	3	9-9	6	50	63	43	45	4	37	50	50	50	58	62	55	59	46	46	48	47	46.4
		9-11	41	59	82	51	65	30	58	61	63	58	76	45	45	45	48	54	49	50	55.2
G.	1	10-5	7	29	100	44	75	68	63	100	43	43	68	63	58	61	55	53	50	53	60.5
	2	9-8	13	46	81	44	63	17	66	85	38	62	75	62	64	63	30	57	34	40	53.3
	3	9-7	8		55	46	49	9	54	87	12	12	47	72	76	74	57	50	51	53	51.5
	4	9-10	8		37	43	27	0	55	50	37	63	53	56	63	59	39	26	40	35	39.9
	5	9-9	22	41	80	52	47	34	53	78	14	36	66	75	69	72	49	45	46	47	54.8
	6	9-9	12	67	87	48	63	6	65	58	58	50	83	72	70	71	40	47	37	41	57.1
	7	10-0	1	0	50	35	14	0	0	0	0	0	25	67	63	65	48	41	43	44	31.8
	8	10-3	3	0	70	37	86	0	43	67	33	33		75	65	70	48	41	43	44	46.2
	9-10	74	44	75	47	54	21	57	75	31	43	67	77	62	70	45	47	43	45	53.3	
H.	1	9-10	5	20	50	39	51	0	38	80	0	40	30	66	62	64	38	41	35	38	39.2
	2	9-11	2	100	85	47	100	87	70	100	50	50	100	89	71	80	73	67	43	61	77.7
	3	10-0	5	0	56	47	31	0	34	80	20	0	25	56	34	45	19	39	25	28	30.5
	4	10-0	5	0	80	50	71	20	52	60	20	40	65	58	62	60	43	34	46	46	50.9

5	9-9	2	50	0	57	0	0	0	0	0	0	50	79	53	66	70	65	55	63	39.9
6	9-8	5	0	74	36	7	10	46	40	20	40	60	77	54	66	41	34	34	36	39.4
7	10-1	3	0	57	40	38	0	30	33	0	33	67	31	39	35	23	13	21	19	29.9
8	10-3	2	0	55	30	50	25	25	0	0	0	25	58	34	46	38	27	30	32	33.1
	9-11	29	14	60	43	42	13	39	55	14	27	47	57	48	53	39	43	35	39	40
I.	1	9-10	16	81	49	84	19	62	69	31	75	81	78	58	68	68	52	64	61	63.3
2	10-1	3	33	87	50	71	0	67	100	0	0	50	56	58	57	40	33	33	35	48.2
3	9-9	3	33	30	40	76	17	33	33	33	33	33	53	33	43	29	39	18	29	36.2
	9-10	22	33	75	48	81	16	59	68	27	59	70	72	55	64	59	52	53	55	56.1
J.	1	9-4	28	68	89	52	33	64	89	43	36	73	76	68	72	71	59	56	63	66.6
2	9-6	9	33	44	26	54	6	36	22	33	11	31	66	60	63	16	17	17	17	33.8
3	9-9	3	0	3	30	5	8	40	33	0	33	25	41	41	41	0	0	0	0	16.1
4	9-4	1	0	90	35	0	0	40	0	0	0	50	53	50	52	15	50	30	32	34.4
5	9-3	2	50	100	45	86	25	70	100	50	50	100	74	60	67	85	56	75	72	68.8
6	9-7	3	33	77	60	57	15	67	100	0	67	67	66	54	60	43	49	40	44	52.3
7	9-7	6	0	17	8	17	4	35	50	20	20	54	62	55	59	33	16	31	27	27.7
	9-5	52	46	67	41	67	22	54	69	33	31	61	70	62	66	51	42	42	45	52.1
K.	1	9-9	26	27	59	41	0	47	65	38	50	60	61	47	54	34	39	35	36	42.1
2	9-10	12	42	53	34	49	6	47	67	25	50	48	51	43	47	54	41.4	26	26	41.4
3	9-11	27	30	73	41	42	2	37	48	21	41	30	58	50	54	24	29	26	26	36.8
4	10-3	5	80	72	46	60	0	34	40	0	20	65	48	44	46	24	29	26	26	43.2
5	10-3	5	80	100	30	14	33	64	60	80	60	75	57	49	53	23	38	37	33	55.8
6	9-6	13	77	66	33	42	23	42	62	8	69	48	56	48	52	15	19	12	15	44.4
7	10-3	4	25	20	13	21	12	45	25	50	25	25	74	62	68	15	19	12	15	28.6
8	9-7	8	37	61	42	68	44	49	37	13	37	59	49	43	46	27	34	30	30	50.2
	9-10	100	39	64	38	47	10	44	55	27	47	48	57	48	53	27	34	30	30	40.5

Tabular Report of Examinations of Children, Etc. — Continued.

Towns, designated by Letters.	Schools, designated by Figures.	A've Age of the Pupils whose Work is reported.	Number of Pupils.	Addition in Column.	Mental Arithmetic.	SENTENCES.						READING.			LETTER.				Average Totals.		
						Penmanship.	Capitals.	Punctuation.	Spelling.	SPELLING OF —			Mechanical Execution.	Expression.	Average.	Thought and Expression.	Spelling, Punctuation, &c.	Date, Address, &c.		Average.	
										"Which."	"Scholar."	"Whose."									
L.	1	9-8	20	70	94	57	83	53	63	85	70	45	70	72	64	68	47	56	53	52	65.2
	2	9-3	4	75	93	66	96	94	68	75	0	75	77	77	77	77	77	77	76	77	79.3
	3	9-11	6	20	88	50	86	58	57	83	50	0	50	67	63	65	70	56	71	66	61.3
	4	9-10	3	67	97	57	90	92	70	67	0	33	92	74	68	71	50	47	48	48	71
	5	9-7	7	14	99	58	98	82	84	100	100	71	100	75	61	68	82	79	83	81	76.3
	6	9-8	6	80	77	51	88	58	80	100	83	83	87	66	58	62	86	63	77	75	72.6
		9-8	46	57	92	56	87	65	69	87	69	47	76	72	64	68	63	62	65	63	69
M.	1	9-11	12	75	86	54	58	33	60	75	42	42	65	78	78	78	74	49	65	63	64.6
	2	9-10	20	50	82	41	77	43	37	40	10	20	58	59	47	53	53	42	40	45	52.4
	3	9-5	3	0	30	0	0	0	50	67	100	67	17	86	70	78	3	10	3	5	22.4
	4	10-1	5	20	48	27	46	15	40	40	20	60	30	35	27	31	29	25	24	26	24
	5	10-0	11	27	74	34	48	16	50	36	18	55	41	61	41	51	29	25	24	26	39.2
	6	10-2	4	0	38	25	21	6	45	25	75	50	8	66	42	54	27	24	24	25	27.9
	7	10-2	4	75	65	23	64	0	52	50	50	0	67	57	37	47	27	24	24	25	42.9
	8	9-7	17	0	71	24	36	4	23	71	0	24	11	45	31	38	19	33	22	25	26.6
	9	10-0	9	44	65	39	52	46	46	22	22	56	63	64	38	46	24	28	22	25	44.3
	.	9-11	85	35	71	34	52	24	42	49	24	37	45	59	45	52	38	35	33	35	42.8

N.	1	2	3	4	5	21	52	75	30	48	25	44	95	48	62	50	57	57	57	33	32	28	31	44.3
	9-9	10-5	9-10	9-5	9-5	2	50	80	30	36	13	25	0	0	50	63	56	44	50	30	32	17	26	39.7
						10	80	54	29	21	10	48	40	50	40	68	63	57	60	21	25	21	23	41.4
						1	0	0	50	43	0	70	100	100	100	75	60	52	56	45	55	35	45	40.4
						5	0	51	8	34	0	48	60	40	0	45	61	59	60					34.3
	9-9					39	51	65	27	39	17	45	72	46	49	55	59	56	58	32	31	25	29	41.8
O.	1	2	3	4	5	6	7	9-6	9-10	9-9	9-5	9-7	9-11	9-9	9-10	9-5	9-7	9-11	9-9	9-5	9-7	9-11	9-9	9-10
	9-6	9-10	9-9	9-5	9-7	10-0	9-11	54	45	39	14	52	55	22	55	56	71	63	67	56	48	33	46	52.7
								45	39	30	10	37	12	25	37	44	66	62	64	49	42	44	45	47
								39	30	30	10	48	40	0	40	40	63	56	60	75	71	72	73	38.7
								66	82	0	0	85	100	75	100	62	71	67	69	37	20	25	27	68.2
								42	32	0	0	23	0	0	0	62	56	52	54	54	37	20	27	40.3
								60	71	8	8	48	50	25	50	88	70	60	65	72	59	69	67	59.5
								42	61	9	9	55	64	36	64	59				54	46	54	51	47.9
	9-9							48	53	7	7	50	47	27	49	57	67	61	64	56	47	48	50	51.2
P.	1	2	3	4	5	6	7	9-7	9-7	9-5	9-9	9-6	9-8	9-10	9-6	9-9	9-5	9-7	9-11	9-9	9-5	9-7	9-11	9-9
	9-7	9-7	9-5	9-9	9-6	9-8	9-10	86	61	83	65	75	78	70	59	72	70	71	71	87	75	66	76	73
								81	54	73	42	68	82	48	70	59	68	68	68	61	56	59	59	59.9
								87	50	87	47	58	100	40	50	61	74	70	72	61	51	55	56	62.1
								89	51	74	47	64	82	39	53	69	74	66	70	63	57	50	57	62.2
								65	55	57	13	35	50	25	23	50	56	59	59	24	29	20	24	38.8
								47	57	73	70	59	50	60	20	52	56	46	51	62	60	66	63	56.7
								84	56	80	31	51	46	54	31	52	67	61	64	67	54	63	61	59.4
								78	54	81	22	76	92	58	85	66	77	57	67	74	59	62	65	61.4
								96	58	83	28	70	89	56	78	72	67	59	63	62	66	58	62	62.7
								90	52	96	55	60	83	33	67	58	67	59	63	74	61	58	65	66.7
								71	38	89	25	62	80	20	20	65	66	58	62	69	50	50	56	58.8
								44	46	56	50	60	37	25	27	59	62	54	58	60	39	36	45	49.3
								67	57	78	75	71	57	43	71	79				63	70	64	66	68.1
	9-8							82	51	78	50	66	76	49	56	65	69	62	66	67	59	57	61	62.6

Tabular Report of Examinations of Children, Etc. — Continued.

Towns, designated by Letters.	Schools, designated by Figures.	Ave Age of the Pupils whose Work is reported.	Number of Pupils.	Addition in Column.	Mental Arithmetic.	SENTENCES.							READING.			LETTER.				Average Totals.	
						Pernanship.	Capitals.	Punctuation.	Spelling.	SPELLING OF —			Mechanical Ex- cution.	Expression.	Average.	Thought and Ex- pression.	Spelling, Punc- tuation, &c.	Date, Address, &c.	Average.		
										"Which."	"Scholar."	"Whose."									
Q.	1	9-9	10	20	58	40	37	5	36	40	30	70	43	43	47	45	9	22	14	15	31.2
	2	9-9	13	15	64	45	46	11	63	46	31	69	81	57	66	23	33	42	33	46.3	
	3	9-6	16	31	79	52	70	28	60	50	37	87	77	63	53	58	62	71	76	69	60.2
	4	9-7	20	25	75	48	59	26	69	75	45	65	83	70	62	66	78	61	79	73	61.3
	5	9-9	3	33	30	58	81	8	57	100	33	67	92	60	52	56	62	56	70	63	54.9
	6	9-6	8	25	60	35	56	16	47	37	50	63	59	51	44	48	30	23	26	26	39.3
	7	9-11	5	0	14	40	23	0	36	20	0	20	45	38	52	45	10	17	11	13	23.8
	8	9-8	4*											40	47	44					44	49.3
R.	1	9-11	22	55	79	50	82	70	56	64	27	41	81	58	56	57	72	51	69	64	64.9
	2	10-3	5	80	72	37	57	15	44	40	20	0	55	66	56	61	58	33	60	50	52.8
	3	9-6	5	60	72	41	57	5	48	20	40	20	55		56		36	47	27	37	44.8
		9-11	32	60	77	47	74	51	53	53	28	31	73	60	56	58	64	48	61	58	60.3
S.	1	9-7	27	33	75	44	74	49	50	74	15	37	63	71	62	67	62	56	59	59	58.2
	2	9-9	8	50	84	59	91	34	74	100	25	50	56	70	63	67	55	53	47	52	61.3
	3	9-7	9	11	82	59	72	22	61	89	22	56	72	68	70	69	47	54	43	48	55.1
	4	9-9	10	60	68	61	97	35	71	90	50	60	57	65	53	59	70	67	78	72	65.2
		9-8	54	37	76	52	80	40	59	83	24	46	62	69	62	66	60	50	58	59	59.5

T.	1	9-9	21	71	95	60	81	71	74	100	52	81	72	78	60	64	73	72	77	74	73 9
	2	9-10	8	23	81	52	61	28	64	87	37	37	47	56	56	56	46	48	42	45	50.8
	3	9-11	18	50	75	52	75	60	54	56	56	50	54	57	53	55	70	57	70	66	60.6
	4	9-11	15	74	83	62	83	33	100	53	60	60	68	76	68	72	60	63	62	62	65.4
	5	9-2	3	0	57	55	71	50	77	100	33	0	83	76	78	77	85	66	87	79	65.4
	6	9-6	12	50	86	49	77	65	56	75	42	75	55	74	70	72	70	58	81	71	66.2
	7	9-2	6	50	78	30	40	12	40	33	33	50	47	69	65	67	58	53	71	61	51.8
	8	9-7	14	50	91	49	67	9	62	93	36	54	71	68	64	66	59	59	53	57	58.5
	9	9-7	21	33	84	54	48	25	49	86	38	43	50	61	57	50	52	51	43	49	51.3
	9-8		118	51	84	54	60	42	60	83	45	56	62	68	61	65	63	50	63	62	61.3
U.	1	9-4	39	38	80	52	70	33	57	69	21	46	72	77	71	74	43	57	42	47	61.1
	2	9-7	32	38	82	58	62	54	52	75	6	58	72	75	67	71	60	56	58	58	58.8
	3	9-9	25	60	61	52	74	26	57	88	56	48	71	67	73	70	75	58	63	65	59.6
	4	9-10	21	62	80	60	73	20	61	67	24	43	82	76	66	71	57	58	53	55	65.7
	9-7		117	47	78	55	60	30	57	74	25	50	74	75	69	72	57	57	53	56	60.8
Y.	1	9-11	4	0	63	55	68	43	55	75	75	50	63	78	72	75	42	45	41	43	52.1
	2	9-2	6	33	32	62	50	29	67	60	80	60	67	70	62	66	32	61	43	45	50.7
	3	10-1	5	80	44	47	60	15	66	33	100	33	70	74	56	65	19	20	21	20	47.7
	4	9-5	10	80	60	48	60	5	42	29	80	56	58	59	53	56	48	58	66	57	53.1
	9-7		25	60	51	52	59	19	55	45	86	51	63	68	59	64	37	49	47	44	51.6

* Could neither write nor print. Not included in making up the average of the town.

Tabular Report of Examinations of Children, Etc. — Concluded.

Towns, designated by Letters.	Schools, designated by Figures.	Av'ge Age of the Pupils whose Work is Reported.	Number of Pupils.	Addition in Column.	Mental Arithmetic.	SENTENCES.							Spelling of "Weak," "Waste," "Sail," "Rode."	READING.			LETTER.				Average Totals.
						Penmanship.	Capitals.	Punctuation.	Spelling.	SPELLING OF —				Mechanical Execution.	Expression.	Average.	Thought and Expression.	Spelling, Punctuation, &c.	Date, Address, &c.	Average.	
										"Which."	"Scholar."	"Whose."									
W.	1	9-7	20	25	75	36	37	6	58	85	35	45	71	72	64	68	42	46	44	48	
	2	9-7	14	79	86	31	36	23	54	54	69	69	75	82	74	78	42	42	48	56	
	3	10-3	2	0	0	50	93	37	75	100	50	100	87	76	80	78	35	39	55	56.4	
	4	9-10	4	0	52	41	6	12	55	75	25	50	69	68	58	63	42	45	49	41.4	
	5	9-6	9	56	38	32	59	22	48	78	33	67	41	57	70	64	10	10	10	37.8	
		9-7	49	43	66	35	41	18	55	75	44	59	67	72	68	70	36	38	40	48.3	
X.	1	9-10	7	0	46	31	22	3	34	29	43	43	43	52	36	44	5	9	11	24.3	
	2	9-8	4	0	72	38	32	25	37	0	75	75	63	50	46	48	29	46	64	41.8	
	3	9-6	9	0	66	16	19	3	41	67	33	67	37	43	31	37	37	32	45	38	
	4	10-1	3	0	33	27	24	0	30	33	33	67	42	51	46	49	12	27	27	26.4	
	5	10-0	1	100	70	45	29	0	50	0	0	100	75	54	56	55	65	50	45	53.3	
	6	9-5	2	0	65	55	57	0	65	100	0	100	37	67	55	61	45	63	52	46.8	
		9-8	26	4	58	29	26	6	39	43	38	66	45	50	39	45	26	30	37	32.4	

AVERAGES FOR THE TOWNS.

No. of Schools	9-9	114	61	70	50	82	54	54	63	54	51	75	59	54	56	50	56	51	52	59.7
A.	11	9-9	114	61	70	50	82	54	54	63	54	51	75	59	54	56	50	56	51	52
B.	8	9-10	69	61	83	51	87	50	59	65	67	51	71	59	54	57	55	43	43	54
C.	6	9-7	116	51	79	73	100	95	91	92	85	95	89	84	74	79	78	83	82	61.4
D.	2	10-1	46	65	82	57	92	67	60	72	56	76	70	53	57	55	65	50	56	82.1
E.	3	9-10	83	49	63	51	92	66	67	84	60	76	67	68	55	62	68	67	71	64.3
F.	3	9-11	41	59	82	51	65	30	58	61	63	58	76	45	45	48	48	49	50	55.2
G.	8	9-10	74	44	75	47	54	21	57	75	31	43	67	77	70	45	43	43	45	53.3
H.	8	9-11	29	14	60	43	42	13	39	55	14	27	47	77	62	43	39	35	39	40
I.	8	9-10	22	33	75	48	81	16	59	68	27	59	70	72	55	52	59	53	55	56.1
J.	7	9-5	52	46	67	41	67	22	54	69	33	31	61	70	62	66	51	42	45	52.1
K.	8	9-10	100	39	64	38	47	10	44	55	27	47	48	57	53	53	27	34	30	40.5
L.	6	9-8	46	57	56	56	87	65	69	87	69	47	76	72	64	68	63	62	65	69
M.	9	9-11	85	35	71	34	52	24	42	49	24	37	45	59	45	52	38	35	33	42.8
N.	5	9-9	39	51	65	27	39	17	45	72	46	49	55	59	56	58	32	31	25	41.8
O.	7	9-9	45	40	80	48	53	7	50	47	27	49	57	67	61	64	56	47	48	51.2
P.	13	9-8	190	42	82	51	78	50	66	76	49	56	65	69	62	66	67	59	57	62.6
Q.	8	9-8	79	23	64	46	54	18	57	53	36	68	71	60	54	57	46	46	48	49.3
R.	4	9-11	32	60	77	47	74	51	53	53	28	31	73	60	56	58	64	48	61	60.3
S.	3	9-8	54	37	76	52	80	40	59	83	24	46	62	62	66	60	59	58	59	59.5
T.	3	9-8	118	51	84	54	69	42	60	83	45	56	62	68	61	65	63	63	62	61.3
U.	4	9-7	117	47	78	55	60	39	57	74	25	50	74	75	69	72	57	53	56	60.8
V.	4	9-7	25	60	51	52	59	19	55	45	86	51	63	68	59	64	37	49	47	51.6
W.	5	9-7	49	43	66	35	41	18	55	75	44	59	67	72	68	70	36	40	38	48.3
X.	6	9-8	26	4	58	29	26	6	39	43	38	66	45	50	39	45	26	30	37	32.4

AVERAGES FOR THE COUNTY.*

	154	9-8	1,050	46	73.9	49.6	69	40.1	58.1	69.2	44.8	54.2	65.5	66	57.9	62	53.5	52.0	51.7	52.6	57

* The average of the county in each branch is the average of the pupils within grade (between eight and a half and ten and a half years), who actually did the work.

TABLES OF AVERAGES FOR GRAMMAR GRADE.

EXPLANATION OF TABLE D.

THE letters of the alphabet designate the towns, and indicate the order in which they were visited.

The numerals designate the schools, with the order in which they were examined.

The numbers expressed in the columns denote the percentages of correct answers given by the pupils reported.

The blank spaces indicate that the pupils were not examined upon items expressed in columns where the spaces occur.

The letter L, in the column marked "Silent Reading," denotes that the pupils of the school wrote a letter, instead of the narrative.

NOTE. — The total average for each school was made up from the percentages in the branches in which that school was examined.

In making up the total average for the town, when the examination of a school in any branch was omitted, the school was allowed the percentage of the other schools of the town in that branch. In making up the total average for the county, the same plan was pursued.

TABLE D. — *Report of Examinations of Children between Twelve and a half and Fifteen and a half Years of Age who have attended School on an Average Eight Years.*

PERCENTAGES OF SCHOOLS AND TOWNS.

Towns.	Schools.	Average Age of Pupils whose Work is reported.	Number of Pupils.	ARITHMETIC.						LANGUAGE.										Average Totals.
				EXAMPLES.				Short Process, Example 2.	ORAL READING.			NARRATIVE.								
				1.	2.	3.	4.		Mechanical Execution.	Expression.	Average.	Silent Reading.	Written Expression.	Pennmanship.	Capitals and Punctuation.	Spelling.	Average.	Spelling Words dictated.		
A.	1	Yr. No.	18	78	67	61	0	59	68	65	69	57	36	67	59	57.8				
	2	4	35	50	75	0	31	65	65	67	48	48	67	48	53	46.5				
	3	14-0	20	55	71	60	0	47	74	75	37	56	42	60	47	74				
	4	13-1	3	67	17	0	0	43	62	60	46	51	29	52	47	69				
	5	13-5	5	80	40	20	0	21	50	55	30	48	55	18	40	30				
	6	13-5	2	100	50	50	50	35	61	58	33	38	37	29	60	58				
	7	12-10	14	64	64	29	21	63	64	53	72	38	75	85	65	63.8				
	8	13-6	2	0	75	0	0	45	71	68	59	48	46	63	57	61				
	9	13-0	103	67	60	39	3	42	68	67	60	52	40	59	52	65	52.6			
B.	1	14-4	25	52	80	32	28	48	66	64	65	61	77	58	65	60	58.8			
	2	13-7	10	30	50	30	30	35	45	45	46	53	46	42	50	65	45.6			
	3	14-3	10	50	60	70	30	53	69	69	69	67	78	56	65	67	61.8			
	4	12-6	3	67	67	0	0	34	76	70	73	73	70	43	58	57	51.7			
	5	13-10	21	52	67	71	14	51	74	70	72	54	77	56	82	67	62.5			
	6	13-3	13	54	62	38	0	51	76	48	69	51	45	49	52	60	52.2			
	7	12-9	6	50	67	0	0	29	57	51	54	42	61	48	50	43.2				
	8	13-1	6	33	50	0	0	21	50	50	50	42	55	33	39	42	36.9			
	9	13-5	5	50	50	0	0	25	50	50	50	42	62	49	56	80	39.4			
	13-9	99	49	65	38	19	43	66	64	65	56	70	53	65	60	55.4				

C.	1	14-0	18	67	72	61	39	60	11	81	83	82	60	90	84	78	91	81	75	73.6
	2	13-8	9	100	78	44	56	70	33	83	83	83	57	85	85	85	91	81	78	77.1
	3	13-11	25	88	92	72	36	72	40	83	72	78	77	82	81	90	93	86	80	79.4
	4	14-7	4	75	75	50	75	69	0	74	80	77	73	82	83	74	84	79	73	74.8
	5	14-2	8	75	88	75	38	69	38	81	79	80	59	88	78	85	90	80	75	75.9
	6	14-1	23	83	96	70	52	75	30	77	77	77	72	88	85	78	89	82	77	78.7
		14-0	87	82	86	66	45	70	29	80	78	79	70	88	82	83	89	82	77	77.2
D.	1	14-5	53	85	86	64	11	62	49	71	67	69	58	66	54	45	65	58	67	61.6
	2	13-7	6	33	33	0	0	17	0	55	51	53	32	29	26	30	43	32	41	31.1
		14-4	59	80	81	57	10	57	44	69	65	67	55	62	51	43	63	55	64	58.3
E.	1	13-11	33	58	73	36	33	50	18	75	69	72	58	74	53	50	81	65	68	61.5
	2	14-1	20	70	60	55	70	64	15	78	68	73	58	73	54	66	85	67	80	68.1
	3	13-4	4	50	25	50	0	31	0	77	69	73	48	48	48	43	51	48	47	46.4
	4	12-10	3	33	67	0	0	25	0	62	50	56	L	55	53	37	51	49	60	42.6
		13-11	60	60	65	41	41	52	15	75	67	71	57	71	54	59	79	64	70	61.6
F.	1	13-5	31	74	84	42	0	50	26	65	64	65	45	49	43	43	56	47	71	53
G.	1	14-2	24	83	96	54	33	67	21	81	73	77	73	73	49	59	76	66	75	68.8
	2	13-10	8	44	33	11	0	22	0	62	54	58	34	37	37	14	20	28	46	32.7
	3	13-5	9	33	60	0	0	23	0	76	64	70	L	75	39	38	43	49	42.8	42.8
	4	13-11	22	64	82	36	5	47	18	69	57	63	75	76	59	44	67	64	59	57.8
	5	13-6	10	40	60	20	10	33	0	67	63	65	L	69	40	65	66	60	48	49.8
	6	13-11	20	40	35	0	0	19	0	69	69	69	L	46	36	40	36	40	48	37.1
		13-11	93	56	67	26	11	40	10	72	65	68	68	65	46	46	56	56	62	53.3

Report of Examinations of Children, Etc. — Continued.

Towns.	Schools.	Average Age of Pupils whose Work is reported.	Number of Pupils.	ARITHMETIC.					LANGUAGE.										Average Totals.
				EXAMPLES.				Short Process, Example 2.	ORAL READING.			NARRATIVE.						Spelling Words dictated.	
				1.	2.	3.	4.		Mechanical Execution.	Expression.	Average.	Silent Reading.	Written Expression.	Penmanship.	Capitals and Punctuation.	Spelling.	Average.		
H.	1	13-11	8	50	38	25	13	0	74	70	72	47	53	52	44	54	50	72	43.3
	2	13-8	5	20	80	60	0	0	70	55	63	48	70	52	48	75	59	72	54.2
	3	14-2	6	50	67	67	0	0	51	40	46	L	56	52	54	57	55	44	48.9
	4	13-10	5	60	60	60	20	0	68	68	68	76	76	55	62	80	70	55	62.3
	5	13-7	3	33	67	0	0	0	69	58	64	68	43	36	50	62	52	35	44.2
	6	13-1	3	0	0	33	0	8	43	33	38	L	47	37	38	41	41	53	27.9
	7	14-4	6	50	67	67	0	0	57	53	55	L	72	47	46	59	56	53	51.9
		14-0	36	42	56	47	6	0	63	56	60	57	61	49	49	61	55	52	49.9
I.	1	13-2	9	56	89	77	22	0	79	79	79	57	61	46	51	56	54	63	61.3
	2	14-3	5	60	40	40	0	0	76	64	70	44	49	44	35	66	48	50	47.3
	3	14-5	7	43	29	29	0	0	57	41	49	L	52	42	41	37	43		37.1
		13-10	21	53	57	52	9	0	71	63	67	52	55	44	44	52	49	58	50.8
J.	1	14-0	42	71	79	29	29	3	77	66	72	47	55	53	41	54	50	58	54.9
	2	13-11	6	50	50	55	0	0	75	59	67	L	49	34	38	52	43	53	46.8
	3	14-8	3	0	50	0	0	0	65	53	59	L	61	51	62	59	58		40.1
	4	13-11	9	78	100	22	0	33	74	61	68	53	56	43	32	60	49	54	52.8
	5	13-5	11	27	45	9	0	0	76	65	71	52	72	48	60	73	61	54	48.4

EXAMINATIONS IN NORFOLK COUNTY. 193

K.	6	13-11	4	100	0	0	0	0	25	0	72	60	66	28	51	48	33	53	43	60	41.7
	7	13-9	6	67	33	17	33	38	0	0	76	66	71							67	47.7
		13-11	81	63	66	24	18	43	5	76	64	70	47	57	49	42	57	50	57	51.5	
	1	13-9	34	71	47	26	9	38	12	74	71	73	48	55	45	41	45	47	69	50	
2	13-4	13	77	54	15	0	37	15	76	61	69	64	63	49	42	59	55	53	50.9		
3	13-9	24	63	58	13	0	34	0	77	65	71	43	48	38	30	48	41	40	44.7		
4	13-0	5	0	60	0	0	0	15	0				L	58	49	39	37	46	31.4		
5	14-2	4	0	50	50	0	0	25	0	77	67	72	L	39	30	26	27	31	54		
6	13-10	13	75	58	17	8	40	8	73	67	70	42	55	45	37	51	47	54	48.5		
7	14-6	8	38	75	0	13	32	13					L	62	37	59	49	52	50		
8	13-8	4	0	50	25	25	25	25	0				L	74	54	66	60	64	68		
	13-9	105	59	55	18	6	35	8	75	67	71	48	55	43	40	48	47	59	47.8		
L.	1	13-8	12	67	58	33	8	42	8	78	62	70	65	73	61	69	61	66	71	58.8	
	2	12-7	3	67	67	100	33	67	0	82	80	81	L	65	62	75	60	66	63	68.5	
	3	13-6	9	67	100	33	0	50	0				40	50	42	42	54	46	51	47.9	
	4	13-7	17	53	88	76	47	66	29	80	70	75		52	48	25	49	46	69	60.4	
	5	13-8	9	73	93	22	0	48	0	71	67	69	38	48	32	30	46	39	61	52	
	6	13-10	15	80	53	13	0	37	0	75	71	73							60	45.5	
	13-7	65	68	76	41	15	50	9	77	69	73	48	58	46	44	52	50	63	54.8		
M.	1	14-0	32	56	53	34	22	41	19	78	74	76	67	66	45	42	59	56	55	54.3	
	2	13-5	2	100	50	0	0	38	0	82	84	83	L	52	45	40	75	53	55	52.8	
	3	14-1	8	75	75	50	0	50	0	67	53	60	L	62	38	68	83	63	56	57	
	4	14-5	5	0	20	0	0	5	0	56	51	54	L	33	34	24	30	30	44	26.5	
	5	14-2	4	50	75	0	0	31	0				L	51	24	46	44	41	43	37	
	6	14-3	6	67	50	17	50	46	0	59	60	60	28	36	38	43	42	37	52	45.2	
	7	14-2	5	20	100	20	0	35	0	52	52	52	7	13	51	16	16	21	50	33.1	
	14-1	62	52	58	27	16	38	10	71	61	66	55	54	42	42	38	46	53	47.4		

Report of Examinations of Children, Etc. — Continued.

Towns.	Schools.	Average Age of Pupils whose Works reported.	Number of Pupils.	ARITHMETIC.					LANGUAGE.										Average Totals.									
				EXAMPLES.					ORAL READING.					NARRATIVE.														
				1.	2.	3.	4.	Average.	Addition in Column.	Multiplication and Division.	Simple Interest.	Measurement.	Average.	Mechanical Execution.			Expression.	Average.		SILENT READING.			Written Expression.	Penmanship.	Capitals and Punctuation.	Spelling.	Average.	Spelling Words dictated.
														Execution.	Spelling.	Spelling.				Spelling.	Spelling.							
N.	1	Yr. Mo.	26	95	89	42	0	57	11	68	68	62	63	42	52	64	57	66	57.5									
	2	14-0	4	50	75	0	0	31	0	78	70	L	68	28	42	49	47	48	45.1									
	3	13-10	16	50	94	44	6	49	0	62	62	56	61	47	44	61	54	58	55.1									
	4	14-0	2	0	100	50	0	38	0	58	52	L	50	33	43	20	37	40.6										
	5	13-5	4	100	75	25	75	69	25	61	57	L	62	40	50	60	53	70	61.9									
	6	14-1	8	75	38	13	0	32	0	61	59	L	55	31	46	45	44	52	43									
O.	1	13-11	60	75	82	35	7	50	6	71	61	66	60	41	48	58	54	61	55									
		13-11	13	46	69	69	0	46	0	74	74	74	56	45	43	60	55	61	55.6									
		14-1	11	73	73	73	27	62	27	75	61	68	75	44	49	69	62	71	63.5									
		13-2	3	67	67	0	34	0	73	63	68	68	75	48	62	67	61	50	42.9									
		13-9	3	67	67	67	67	67	0	75	59	67	L	65	37	64	56	54	63.1									
	5	13-6	3	100	100	67	0	67	0	82	72	77	L	59	37	64	56	54	63.7									
P.	1	13-10	33	64	73	64	15	54	9	75	67	71	65	44	49	64	58	64	59.4									
		13-10	41	71	81	58	15	56	0	74	62	68	55	50	47	65	56	62	58.7									
		13-9	46	74	74	39	24	53	26	76	68	72	61	55	55	49	68	60	67	60								
		13-3	2	0	50	100	0	38	0	78	72	75	30	60	60	39	68	51	50.6									
		13-9	24	75	83	63	8	57	4	77	69	73	60	65	68	52	62	61	62	62								
	4	13-9 <td>24</td> <td>75</td> <td>83</td> <td>63</td> <td>8</td> <td>57</td> <td>4</td> <td>77</td> <td>69</td> <td>73</td> <td>60</td> <td>65</td> <td>68</td> <td>52</td> <td>62</td> <td>61</td> <td>62</td> <td>62</td>	24	75	83	63	8	57	4	77	69	73	60	65	68	52	62	61	62	62								

5	14-1	19	58	84	68	0	53	5	72	62	67	54	71	51	47	59	56	68	57.8
6	13-11	40	78	75	45	10	52	13	76	64	70	62	75	54	53	66	62	68	60.5
7	13-10	17	65	71	76	0	53	6	73	60	67	74	71	59	57	80	68	64	62.5
	13-11	189	71	76	54	12	53	11	75	70	73	60	66	55	50	66	59	65	60
Q.	1	13-7	7	38	63	13	35	43	66	60	63	30	32	30	25	26	29	55	38.6
	2	14-0	19	42	42	16	0	25	69	55	62	42	43	35	13	44	35	61	38.8
	3	13-8	17	45	57	35	6	36	72	64	68	50	55	39	40	46	46	46	46.3
	4	13-6	18	61	56	56	0	43	0	76	72	50	62	37	29	59	47	62	46.7
	5	13-7	4	100	100	50	0	63	0	78	73	29	40	49	47	50	43	63	56.2
	6	13-4	3	0	100	67	0	42	0	58	55	25	48	47	51	10	36	48	43.2
	7	12-9	1	0	100	100	0	50	0					40	32	45	38		43.3
	13-9	69	49	59	36	4	37	6	71	63	67	44	50	36	29	44	41	57	45.1
R.	1	14-2	24	63	67	42	54	25	73	63	68	40	52	49	57	67	55	69	57.8
	2	13-11	10	60	50	10	0	30	0	53	62	39	41	38	16	27	32	45	37.5
	3	13-9	7	29	59	43	29	40	0			42	51	41	41	66	48	50	45.1
	14-0	41	56	61	34	30	45	15	72	60	66	46	49	45	44	57	48	60	51.2
S.	1	14-2	31	52	48	23	6	32	69	63	66	52	55	47	37	53	49	71	48
	2	14-6	12	100	58	33	0	48	0	63	70	47	68	62	67	81	65	70	60.5
	3	13-9	9	45	36	45	33	0	65	59	62	53	60	42	63	74	58	46	51.8
	14-2	52	62	48	29	9	37	6	70	62	66	51	59	50	48	63	54	67	51.5
T.	1	14-3	53	91	79	58	28	64	80	76	78	74	83	70	69	86	76	74	72.3
	2	14-6	21	76	76	62	0	54	19	67	71	76	71	61	55	80	69	74	64.4
	3	14-3	26	85	77	81	12	64	46			65	67	69	62	81	69	70	66.9
	14-4	100	86	78	65	18	62	29	79	73	76	72	76	68	64	73	73	73	68.8

Report of Examinations of Children, Etc. — Concluded.

Towns.	Schools.	Average Age of Pupils whose Work is reported.	Number of Pupils.	ARITHMETIC.				LANGUAGE.										Average Totals.				
				EXAMPLES.				ORAL READING.			NARRATIVE.											
				1.	2.	3.	4.	Addition in Column.	Multiplication and Division.	Simple Interest.	Measurement.	Average.	Short Process, Example 2.	Mechanical Execution.	Expression.	Average.	Silent Reading.		Written Expression.	Pennmanship.	Capitals and Punctuation.	Spelling.	Average.	Spelling Words dictated.
U.	1 2 3 4	Yr. Mo. 14-2 13-11 13-10 14-2	31 14 24 24	71	77	61	16	56	16	78	68	73	76	70	58	59	76	68	70	65	63.3	
				64	71	86	14	59	79	67	73	57	73	49	58	63	60	79	63	60	79	63.3
				75	88	58	29	63	81	73	80	73	83	77	73	80	58	61	83	71	80	60.9
				63	83	63	58	67	13	83	73	78	71	53	54	61	62	65	66.4			
V.	1 2 3 4	14-1	93	69	80	65	30	61	16	80	70	75	71	73	55	58	72	66	73	66.3		
				100	60	20	20	50	80	64	72	L	81	61	87	95	81	86	60	60	68.5	
				0	100	100	0	50	83	69	76	100	87	70	85	80	84	60	69.5			
				60	60	60	0	45	20	36	59	46	39	51	46	54	46.5	60	46.5			
W.	1 2 3	13-8	19	74	68	63	5	53	21	75	62	69	53	67	53	57	72	60	69	59.8		
				72	64	22	3	40	78	66	72	44	66	61	44	53	63	52.9				
				63	47	37	11	40	0	77	67	72	41	56	55	32	48	70	51.2			
				65	69	43	9	47	22	82	74	78	63	72	60	45	78	64	78	61.5		
X.	1 2	13-8	79	68	61	32	7	42	6	79	69	74	49	65	59	41	61	55	69	55		
				100	100	100	100	100	50	50	50	60	85	55	50	65	52	75				
				29	57	42	29	39	77	65	71	36	67	47	50	52	51					
				38	62	49	38	47	74	63	69	39	69	48	50	63	54	53.8				

AVERAGES FOR THE TOWNS.

	No. of Schls.	Yr. Mo.	103	67	60	39	3	42	2	68	67	68	48	60	52	40	59	52	68	52.6
A.	9	13-7	99	82	65	38	19	43	16	66	64	65	56	70	53	56	65	60	68	52.6
B.	9	13-9	87	89	86	66	45	70	29	80	78	79	70	88	82	83	80	82	64	55.4
C.	6	14-0	59	80	81	57	10	57	44	69	65	67	55	62	51	43	63	55	77	77.2
D.	2	14-4	60	60	65	41	41	52	15	75	67	71	57	71	54	59	79	61	70	58.3
E.	4	13-11	31	74	81	42	0	50	26	65	64	65	45	49	43	43	56	47	71	61.6
F.	1	13-5	93	67	67	26	11	40	10	72	65	68	68	65	46	46	56	56	62	53.3
G.	6	13-11	36	42	56	47	6	38	0	63	56	60	57	61	49	49	61	55	52	49.9
H.	7	14-0	57	53	57	52	9	43	0	71	63	67	52	55	44	44	52	49	58	50.8
I.	3	13-10	81	63	60	24	18	43	5	76	61	70	47	55	49	42	57	50	57	51.5
J.	8	13-9	105	59	55	18	6	35	8	75	67	71	48	55	43	40	48	47	59	47.8
K.	6	13-7	65	68	76	41	15	50	9	77	69	73	48	58	46	44	52	50	63	54.8
L.	7	14-1	62	52	58	27	16	39	10	71	61	66	55	54	42	42	38	46	53	47.4
M.	6	13-11	60	75	82	35	7	58	6	71	61	66	60	61	41	48	58	51	61	55
N.	6	13-11	60	75	82	35	7	58	6	71	61	66	60	61	41	48	58	51	61	55
O.	5	13-10	33	64	73	64	15	54	9	75	67	71	65	69	44	49	64	58	64	50.4
P.	7	13-11	189	71	76	54	12	53	11	75	70	73	60	66	55	50	06	59	65	00
Q.	7	13-9	69	49	59	36	4	37	6	71	63	67	44	50	36	29	44	41	57	45.1
R.	4	14-0	41	56	61	34	30	45	15	72	60	66	46	49	45	44	57	48	60	51.2
S.	2	14-2	52	62	48	29	9	37	6	70	62	66	51	59	50	48	63	54	67	51.5
T.	3	14-4	100	86	78	65	18	62	29	79	73	76	72	76	68	61	73	73	73	68.8
U.	4	14-1	93	69	80	65	30	61	16	80	70	75	71	73	55	58	72	66	73	66.3
V.	4	13-8	19	74	68	63	5	53	21	75	62	69	53	67	53	57	72	60	69	50.8
W.	3	13-8	79	68	61	32	7	42	6	79	69	74	49	65	59	41	61	55	69	55
X.	2	13-7	8	38	62	49	38	47	0	74	63	69	39	69	48	50	63	54	52	53.8

AVERAGES FOR THE COUNTY.*

	122	13-10	1,646	65.7	68.8	42.9	15.4	48.2	13	73.5	67.2	70.4	56.3	64	52.1	49.4	62.1	56.8	64.8	56.9

* The average of the county in each branch is the average of the pupils within grade (between twelve and a half and fifteen and a half years), who actually did the work.

Arrangement of the Towns according to their rank in the several branches in which the Schools were examined.

PERCENTAGES IN PRIMARY GRADE.											
READING.						PENMANSHIP.					
Towns.	Per Cent.	SPELLING.		LANGUAGE.		TOWNS.		PER CENT.		TOWNS.	
		Towns.	Per Cent.	Towns.	Per Cent.	Towns.	Per Cent.	Towns.	Per Cent.	Towns.	Per Cent.
C. U. W. G. L. S. P. J. T. O. V. I. E. R. N. B. Q. A. D. H. K. M. F. X.	79 72 70 68 66 66 65 64 61 58 58 57 56 55 53 53 45 44	C. L. E. T. P. A. B. D. I. Q. R. S. T. W. J. O. H. K. M. N.	90 73 67 66 65 65 64 63 62 61 60 61 59 48 47 46 43 42	C. E. L. T. P. S. R. D. U. I. B. A. F. O. G. T. V. J. O. H. K. M. N.	82 71 63 62 61 59 58 56 55 54 53 52 51 50 48 47 45 44	L. D. B. F. R. T. C. A. U. P. G. O. E. N. J. S. V. W. I. M. K. Q. H. X.	75 74 72 69 68 66 63 62 60 60 58 58 57 56 55 54 53 52 44 37 31	C. L. E. D. B. F. R. T. C. A. U. P. G. O. E. N. J. S. V. W. I. M. K. Q. H. X.	82.1 69 68 63 62.6 61.3 61.4 60.8 60.3 59.5 56.1 55.2 53.3 52.1 51.2 51.2 49.3 48.3 47.8 46.5 45.5 44.0 42.8 41.8 40.5 40 32.4	C. L. E. D. B. F. R. T. C. A. U. P. G. O. E. N. J. S. V. W. I. M. K. Q. H. X.	79 76 75 74 73 71 71 70 69 68 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0

PERCENTAGES IN GRAMMAR GRADE.

READING.			PENMANSHIP.		SPELLING.		LANGUAGE.		ARITHMETIC.		TOTALS.	
Towns.	Per Cent.		Towns.	Per Cent.	Towns.	Per Cent.	Towns.	Per Cent.	Towns.	Per Cent.	Towns.	Per Cent.
C. U. W.	79		C. E. D.	73	L. D. B.	75	C. L. E.	82	L. D. B.	75	C. L. E.	82.1
G. L. S.	72		U. P. T.	63	F. R. T.	74	E. P. T.	71	F. R. T.	72	E. P. T.	69
L. S. P.	70		L. U. P.	57	S. R. C.	71	D. P. C.	61	S. R. C.	69	D. P. C.	68
P. P. J.	68		V. S. S.	56	T. A. A.	68	B. T. A.	63	T. A. A.	67	B. T. A.	62.6
T. T. O.	66		S. S. S.	54	D. B. D.	68	U. B. D.	66	D. B. D.	67	U. B. D.	61.3
J. T. O.	66		S. S. S.	52	B. D. B.	65	R. D. B.	63	B. D. B.	66	R. D. B.	61.4
T. O. T.	64		S. S. S.	51	D. B. D.	65	U. B. D.	62	D. B. D.	63	U. B. D.	60.8
V. V. V.	64		F. F. F.	51	L. R. Q.	60	A. R. A.	59	L. R. Q.	60	A. R. A.	59.7
I. I. I.	64		F. F. F.	50	O. G. G.	60	S. G. S.	59	O. G. G.	60	S. G. S.	59.5
R. R. R.	58		I. I. I.	48	E. E. E.	58	F. F. F.	55	E. E. E.	58	F. F. F.	55.2
N. N. N.	58		Q. B. Q.	47	N. N. N.	58	G. G. G.	53	N. N. N.	58	G. G. G.	53.3
B. B. B.	57		Q. B. Q.	47	T. T. T.	57	J. J. J.	52	T. T. T.	57	J. J. J.	52.1
Q. Q. Q.	57		H. H. H.	46	W. V. W.	56	O. V. O.	51	H. H. H.	56	O. V. O.	51.2
A. A. A.	56		A. A. A.	43	J. J. J.	55	Q. Q. Q.	49	A. A. A.	55	Q. Q. Q.	49.3
D. D. D.	53		H. H. H.	41	O. N. O.	54	W. W. W.	48	H. H. H.	54	W. W. W.	48.3
H. H. H.	53		K. K. K.	38	K. K. K.	53	M. M. M.	46	K. K. K.	52	M. M. M.	46.8
K. K. K.	52		M. M. M.	35	M. M. M.	52	N. N. N.	44	M. M. M.	52	N. N. N.	44.8
M. M. M.	45		X. X. X.	34	M. M. M.	44	K. K. K.	44	X. X. X.	44	K. K. K.	40.5
F. F. F.	44		N. N. N.	29	I. I. I.	37	H. H. H.	40	N. N. N.	44	H. H. H.	40
X. X. X.	44		N. N. N.	27	X. X. X.	31	X. X. X.	32.4	H. H. H.	37	I. I. I.	32.4

INDEX TO LITHOGRAPHS OF LETTERS, NARRATIVES, ETC.

WORK OF PRIMARY GRADE.	PAGE.
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Best of Letters	202
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WORK OF GRAMMAR GRADE.	
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Primary work in Numbers.

Written.

Mental.

Answers.

184
337
692
476
208
356
575
993
888
4709

21
72
42
45
81
56
56
15
8
4-3
5 oranges.

425
712
124
337
292
292
472
202
352
35

20
32
12
12
2
43
5
ananges

Levi, Jan. 11, 1878.

Dear mother,—

I reached Leam last Saturday in the afternoon at 3 o'clock. It is a very pleasant place. It is a very good working place. I like it very much. I wish I could stay longer. But as you want me I will come home

next Wednesday and I want you to
come down to the depot in the sleigh
for me.
Your daughter.

Lynn, Mass.

Jan. 15, 1879.

Dear cousin,—

I had a very nice time
Christmas and New Year's Day.
I had quite a number of
presents. I did not get any
skates. I am coming home

next Wednesday, and I want
you to meet ^{at} the Old Colony
station. So I will say no
more.

Good-bye.
Yours Truly.

Lynn. March, 10. 18 79

Dear Mother

I received your letter
and was glad to hear from you. I weigh 60
pounds I have a pleasant visit I am coming

home Wednesday. I want you to send the sleigh or the carriage to the old Colony Depot

Send my love to all the folks

From your loving daughter

Lynn Mass. March ¹⁷⁻¹⁸ 1879
Dear Father.

I now sit down to write a
letter and say a few things which
I wish to. I went up town this
morning and heard a splendid har-
mony it played real nice. I saw a
cruel boy last night setting a big

dog on a poor little kitten there was
a man came here begging for
food we gave him some and he
went away I want you to send
a horse and carriage to the Dep^t
for me to come home in.

from

Lynn, Jan. 21, 1879

Dear Father: It has been

real good coasting here to-day.

Mr. Walton gave me a sled

for a Christmas present.
Will you meet me at the
depot on Wednesday?

11 AM AND I AM GOING TO HOME AND HAVE A CHAIR
 PEIT 1000 THREE HUNDRED BEB2

Ly M. Dear Mother I had a meeting and my baby had a
 good time to my father was sick I liked a

I was down to lin and got to take out the
horses in coming

8 ym
four $\frac{3}{4}$

eye am in 2 ym
come ~~down~~ the same
and what me

My dear Mr. Mehe ~~at~~ ~~my~~

and out to where ~~my~~

my dear sister & don't get

& don't say find you lost ~~my~~

and wanted so ~~at~~ sure.

Lynn, Jan. 15. ^{the} 1878.

My Dear Father,—

I have had a nice book for Christmas, a pack of envelops and paper and a good many other things. As I have been down here a long time, I will come home soon, next Wednesday you will meet me at the Old Colony Railroad.

Your Sincere Friend—

Lynn. Jan^y 12 1879.

Dear Father

I am down

in Lynn. I am coming
home next Tuesday.

I wish you were here to.

It is a very nice place.

Your visit sends the sligh.

From your electric son

lynn Feb. 7 Fri/89

Dear mother

I have had a busy time, at 6 o'clock time
I had lot of roomyent that I don't
think I can living them know
dount you thank I'm pretty rich

Dear mother how do you

Do I am having a nice

Time hear I am coming

Home next Wednesday &

will you come to meet

Me good by

7
 75639 Ans 7416

$$\begin{array}{r} 12-5- \\ 9-20- \\ \hline 2-13- \end{array}$$

$$\begin{array}{r} 44.447 = \text{interest } 60 \text{ da} \\ 11.1112 = " \\ \hline 53.33873 = " \\ 183291\frac{2}{3} \end{array}$$

4447 total ft.
 231 ft.

Ans. \$74.1166\frac{2}{3}

66 ft									
33 ft									

$$\begin{array}{r} 83 \\ 231 \\ \hline 462 \end{array}$$

$$\begin{array}{r} 16.5 \\ 990.0 \\ \hline 990.0 \\ \hline 0.00 \end{array}$$

$$\begin{array}{r} \$2692 \\ 8\% \end{array}$$

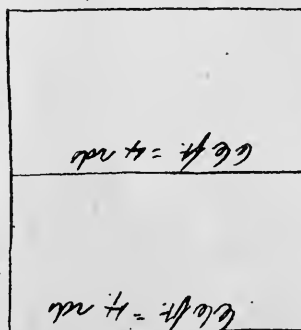
$$215.86 = 1\text{ yr.}$$

$$\begin{array}{r} 85.89 \\ 6 \end{array} = 2 \text{ mo.}$$

$$\begin{array}{r} 8.97 \\ 24 \end{array} = 15 \text{ days.}$$

$$\begin{array}{r} \$44.86 \\ 24 \end{array} = \text{Ans.}$$

$$38 \text{ ft.} = 2^{\text{nd}} \quad 83 \text{ ft.} = 2^{\text{nd}}$$



$$58 \text{ ft.} = 2^{\text{nd}} \quad 88 \text{ ft.} = 2^{\text{nd}}$$

$$66 \text{ ft.} = 4 \text{ in.}$$

$$\begin{array}{r} 7. \\ 7539 \end{array}$$

Q.

$$\begin{array}{r} 612692 \\ 448 \end{array} \frac{2}{3} = \text{Ans.}$$

2 lots.

$$2 + 2 + 4 + 2 + 2 + 4 = 16 \text{ rds. around field}$$

$$\begin{array}{r} 20\$ \\ 10 \end{array} \text{ and.}$$

$$\begin{array}{r} \$200 \\ 200 \end{array} \text{ Cost. Ans}$$

$$66 \text{ ft.} = 4 \text{ in.}$$

No 14, 6777

2A 5-337

72/64044 (88936)
 $\frac{576}{644}$
 $\frac{576}{684}$
 $\frac{548}{548}$
 $\frac{36}{36}$

5-337

$\frac{10674}{5-337}$
 $\frac{64044}{5-337}$

5-337

$\frac{10175}{26685}$
 $\frac{2735-9}{5-337}$

Dec 12
 Aug 8
 141
 26
 15

933975

6) 93.39750 (1536628
 6
 33
 30
 33
 36
 39
 36
 37
 34

.015-
 .0022-
 .0175-

15-
 121
 30
 30

The Persian Punce.

Cyrus, the Persian punce, had many masters, who tried to teach him everything that was good. He was taught with a great many boys of his own age and size. He was of a good disposition and humane temper. Still he had a great desire to command and the other boys made him their judge whenever anything happened that they could not decide. One day his father asked him what he had done and learned that day. "Sir," said Cyrus, "I was punished today for deciding unjustly." "How so," said his father. "Well," said Cyrus, "there were two boys, one a small boy and one a large boy. The small boy had a coat on that

was much too large for him, and a large boy who had a coat that was much too small for him and was too small in every part. So the large boy decided that they should change coats which the small boy would not agree to. And as I was passing by they said that I should be the judge. So I said that as the small coat fitted the small boy better than the large one, I thought it was only right that the small boy should keep the small coat. Now which my master punished me saying that it was not the fitting of the coat that I should go by. And Cyrus was very careful afterwards not to judge unjustly.

An anecdote of Cyrus, Prince of Persia.

Cyrus, prince of Persia, had many masters who endeavored to teach him all that was good and useful. He was educated with several other boys of his own age and had a very humane disposition. It was often noticed that he always wished to command, and the other boys made him their king. One evening his father asked him what he had been taught that day. He answered that he had been punished. Being asked why he replied, "two boys, one, a great and

the other a sweeper, about a foot and a half
I was passing by I was called upon to de-
cide for them. The great boy had a coat
which was too small for him in every way,
and the small boy had a coat which was
much too large for him. The larger boy wished
him to exchange with him but the smaller boy
did not wish to. Upon this the larger boy ex-
changed by force. I decided in favor of the
larger when I should not because the smaller
coat belonged to the smaller boy and the lar-
ger to the great boy.

Anecdote of Cyrus.

Cyrus, with other boys of his own age was educated by masters who endeavored to teach the boys every good thing which they themselves knew. One day Cyrus was asked by his father what he had learned or done on that day. Cyrus replied that he had been punished because he had decided unfair. By his father asked how it happened. Cyrus answered that there were two boys one of whom was large and the other small. It chanced that the small boy had a coat which was much

too large for him while the large boy had one which was as much too small for him. The large boy proposed that they should exchange coats but the other would not consent.

As Cyrus was passing just then the two boys asked him to decide for them. He decided that the large boy should keep the large coat and the other boy the small one.

"Would they not be more fitly clothed in this way?" asked the father. "Yes," said Cyrus. But I was asked to judge which was right and not in what way they would be most fitly clothed.

Thus I decided unfairly and deserved punishment."

Cyrus was a Persian prince who had a number of masters to teach him what was right. He was brought up with other boys about his age. One day his father asked him what he had learned, and he said that he deserved to be punished as he had decided unjustly, and being asked how that could be, he said, "As I was going along the street I saw two boys, one being very large with a small coat, and the other being very small with a large coat

The large boy wanted to exchange, but the small boy would not consent, thereat the big boy took it away from him by force, then the small boy appealed to me to judge which was right. I said that the large boy should keep the large coat and the small boy the small coat; then my master punished me, saying that I was not to judge which coat fitted best, but to judge whether the large boy had a right to take the large coat away from the small boy.

Cyrus the Persian prince had many masters who
 endeavored to teach him one day his father asked what he had
 learnt and he said he got a Locking with out any cause
 he went to school with many other of his more dear
 There was 2 boys 1 boys Coat was too big and the ~~Locking~~
 Boys coat was Contented to hang

I read the big boys coat would fit the ~~Shaggy~~ boy
 and the small coat would fit the small boy and
 He got a Pickensworth coat

The little boys coats

Forbear a young boy who was a strong
sort of a feather of a low temper one day he came home, and he
further asked him if what he had don to day he said that
he had got a broken for Disordering the laing thing What is
the mater cried is farther, he said that as he was going
to school he met to boys fighting about to pockets.
The little boys cote was to large for him and the large
boys was to small for him, and the big boy said that if
they change that it would make it all wright for then
But still the little boy wanted is home best So they
wanted me to decide the matter, and decided and not as it
shud be I got a licking for it.

4
Lovers the Person prince had many
Masters, Who endeavor to teach him
every thing, in there Play they would
call him the King one day When it play
they was one little Boy and a Big Boy
the Big Boy wanted to change coats.
so he put on the little Boys coat
Because the little Boys because it
was bigger than his one and the little
Boy the Big Boys coat.

As the Persian prince had many ~~Misses~~ who endeavored to teach
him many things what was good and what was good boy of good reputation he was
decorated with many small boys of his age in the games he would
made king and day his father asked him what he had learned he said
he had been punished for doing evil how soon ~~asked~~ father he said this there
was two boys one great and one small the small boy had a coat to ~~big~~ for him
and the big boy had one too small for him the big boy purposed to
take the little boys coat then said he would ~~be~~ the fitted as my coat is to
big for me and yours is to big for you as I was going by I happened to meet
me Judy I said that the little boy should keep his coat

About Cyrus

I will tell you about a Boy name
Cyrus he wanted to learn something so
he got two little Boys to learn him one
was a little Boy and the other was a Big one
so the little Boy had a Big jacket and the Big
Boy had a little jacket so they made up
their minds to work and was to have the older
Boy to judge which fit the best and at last he
was punished for drawing so

Cyrus Perian prince was educated by some small
boys And was whipped by his father for not doing wright
The boys that he played with him made him there
prince He wanted to swap coats with a mother boy but
he did not want to swap with him so he took the coat-
off from him and put it on his back

Age 17y 6m

Prince Cyrus.

Prince Cyrus had been nicely educated and had a very good pleasant disposition, but when playing with his young companions he nearly always wanted to command, and the boys generally made him their king. One day his father asked him what he had learned, "O'er," said he, "my master punished me to-day for not deciding justly." "Why how was that?" asked the father. Cyrus answered him thus, there were two boys met one of them was larger than the other and he had on a very

small coat while the other one had a coat on that was as much too large as the other was to small, the large boy wanted to change coats but the other said, "No," so the large boy tried to take the coat by force, just then I happened along and they made me judge but I said for the small boy to keep the small coat, but my master told me that it was not right for the larger boy to have taken the coat from the smaller.

A story of Persian Prince.

Byrne, a Persian prince, had many masters who endeavored to teach him all that was good; and he had been educated with a number of boys of his own age. He was of a good disposition and of a humane temper. One day his father asked him "What he had learned that day," he said Byrne & was punished for deciding improperly. Now it happened that there were two boys one a great boy, and the other a little boy. The little boy had a coat that was much too big for him, and the great boy had a coat that was much too tight for him.

so they quarrelled about it who should have the large coat and who should have the small coat, the little ^{boy} was not willing to give up his coat to the great boy. So you happened to be passing at the time of the quarrel was asked to be the judge and he gave his consent - against that of his master, that the great boy should have the big coat and that the little boy should have the small coat, so the great boy forced the coat from the little boy. Cyrus was punished for giving his consent by his master. Cyrus answered his father thus: "My teacher has punished ^{me} for deciding unjustly, which punishment I certainly deserved."

Cyrus, the Persian Prince.

Cyrus the Persian prince was a very good natured boy, but even in his play he liked to command, and the boys always chose him for their king.

One day his father asked him what he learned at school, and he said he had been punished, his father asked him what for, he said that there was a great boy who had a coat too small for him and a little boy that had a coat too large for him and the great boy wanted to exchange but the little boy

did not wish to, and so the great boy took it away by force, but just then I came by and they asked me to decide, and I decided that the great boy should have the big coat, because it fitted him best, and the little boy to have the small coat because that fitted him best, but the teacher said I had no right to judge so because the big coat belonged to the little boy, and the little coat to the big boy and so the teacher punished me.

~~From~~ Cyrus the Persian Cyrus, was.
born in Persia he had many masters
and received his early education —
with many many other boys. They would
call him master. He endeavored to teach
them every thing was good. and whenever
they would do wrong he would do his
best to stop it one day he got whipped
for interfering between two boys they
called on him as Judge decide there —

matter one day two boys met one very
small boy and one large boy had small
faced and the small boy had a large
faced the large boy persuaded the
other small boy to give him his ^{larger} ~~small~~
jacket but he would not and he left
to try to decide and Cyrus decided
wrongly and therefore got whipped

Cyrus the Persian King

Cyrus had a great many matters to teach him what was right. He was a boy of very good disposition. When he came home at night

his father asked him what he had done that day he said he had

been punished for judging unjustly. Why he asked his father

He said that there were two boys one great boy and a very small one.

The large boy had a very small coat quite as fit at the elbow and the small boy had a very large coat and the large boy proposed they exchange but the little boy did not want to and so they wanted me to be judge and decided that the large boy should have the large coat and that as a hat he promised me for.

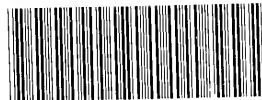
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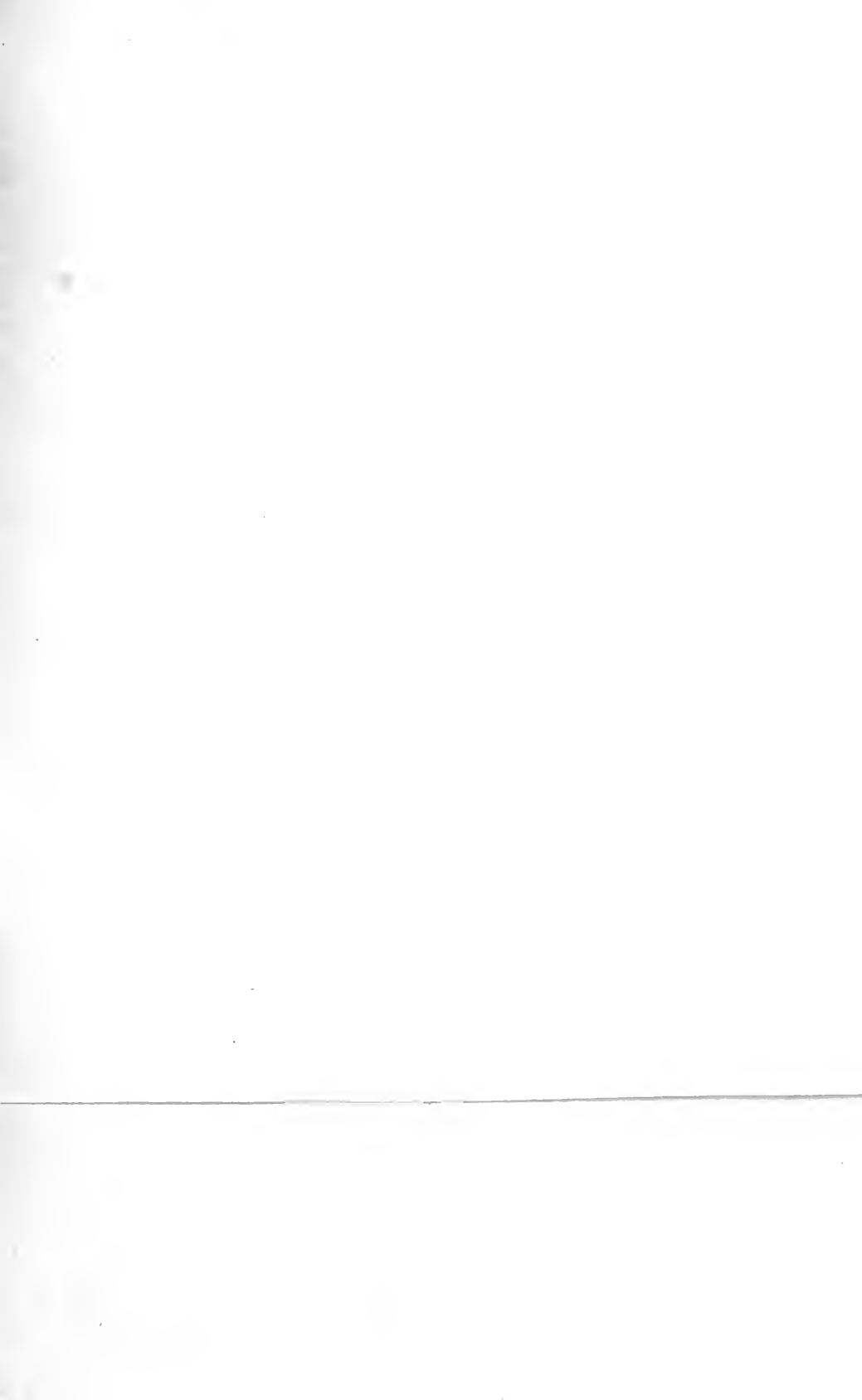
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